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THE SCHOOL JOURNAL

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The business department of THE JOURNAL is on page 296.

All letters relating to contributions should be addressed plainly, "Editors of SCHOOL JOURNAL." All letters about subscriptions should be addressed to E. L. Kellogg & Co. Do not put editorial and business items on the same sheet.

IS primary teaching below grammar school teaching? That people in general think so is admitted; but the reason is that persons below those selected for grammar school have been employed as teachers in the primary schools.

In a town of 5000 inhabitants, a woman of considerable ability opened a "select school" for young children; she often set the boys to weed her garden, and to do various other menial things! This did not prevent her from being well patronized; the patrons gave as a reason for sending to her, "Mrs. C——is real smart, you know."

Several years ago a lady obtained a place in a primary school, was promoted to be principal, and then left that to be a teacher in a grammar school at lower salary; her reason was, "It is so monotonous in a primary school." Who makes it monotonous in a school? The teacher of course. Let any one read the "Quincy Methods" and see if it is necessary for a school to be monotonous. If it is monotonous for a person of trained mind who has the incentive of a fair salary, what must it be for the children, who have such an inborn and insatiable love of novelty?

If any one could describe the primary school as it appears to a child! Some twenty years ago, the principal of a primary school in—well, a very large city—was censured by the board of education because she made them look up at a hole in the wall above her head while they said the Lord's Prayer! It gave them such a devotional look, you know! But the child supposes in blind faith that all that is done is done for the best; it is well that he does.

Was the woman who set the children to weed her onion bed not on the right track, though she did it for economic purposes? Her reason was that they needed something to *do*. She saw dimly the need of manual training over thirty years ago. Should not the primary school-room be a place of activity rather than of death-like sitting still? How can the full steam of childhood be turned on, and yet produce educative results? Who knows?

There come to THE JOURNAL every week "clippings" concerning education that give it a wide view. Most of the important transactions in the educational world thus come before the editors. From these, those transactions that indicate *movement* are condensed for the "Field." In the space allotted to this department a a very good view can be had of the progressive tendencies of education. The attempt is made to give ideas concerning the most active workers in this field.

And yet the editors earnestly solicit all teachers to send us either marked copies of papers containing news or the clipping itself (noting paper, place, and date). They will receive thanks. And then they are also urged to write concerning appointments, etc. There are probably many subscribers who have never written a line to the editors. In the "good time coming" the teacher will use his pen a good deal more than he does at present.

Teachers who read the introductory suggestions for the "General Columbus Exercise" in this number will appreciate the benefit of taking THE JOURNAL into the school room, and letting it lie in some convenient place, for the pupils to gather for themselves the variety of information furnished for the exercise. It would be still better to add several extra copies for the occasion, and give them all a chance to become familiar with the notes of preparation that are sounding from every part of this country, and "over the sea" as well. In America, the children lead on this occasion, and this fact is weighted with significance, inasmuch as therein lies the whole difference between free and caste education. It is the children's day; make it a day to be remembered throughout their whole lives, by letting them taste the full flavor of responsibility and leadership. American citizenship will mean something more to the children after this day than it ever did before. Besides it will be to many, the first opportunity they have ever had to plan and decide important matters. Let it be a pleasant remembrance.

This extra-sized number of THE JOURNAL contains seven additional pages of Columbus material, for the use of schools. This completes twenty-four pages of specially prepared matter for the Columbus anniversary, in which we have covered every need of school-work from the kindergarten to the high school. The appreciation of teachers is being shown in a practical way in the orders for these papers constantly received. Francis Bellamy, chairman of the executive committee, in a private letter says: "I must say that you have been putting some of the very best kind of work into your publications for Columbus day. Nowhere else have I seen such usable things as you have published. They seem to fill about all the wants of the day."

The Official Program for Columbus day exercises, can also be had by application to this office. It will be forwarded at once, in connection with any orders for papers containing the Columbus exercises. These orders will have to be made at once, as the supply is not endless.

THE SCHOOL JOURNAL is always discontinued when so ordered, *provided arrearages are paid*. But it is wholly wrong to take the paper from the post office six months and then order it discontinued *without paying arrearages*. A subscriber who does not want to take THE JOURNAL any longer should say so to the publisher, enclosing what is due on his subscription.

It was a remark of Mr. Beecher that the public school should be so good that the private school could not exist; but he did not take into consideration that these very improvements in the public school would be followed by higher standards in the public mind, and these in turn would open a wider field for superior private schools.

A principal of a high school, lately formed in a city, was paid a salary one of the board of education deemed high. "Why," he said, "twelve gentlemen offered to guarantee me a larger sum if I would open a private school." It is undoubtedly true that the really skilful teachers in the public schools could meet with equal success if they opened private schools; the main difficulty to contend with would be buildings.

It is a mistake to suppose that private schools are not efficient; the teachers are, in most cases, college graduates; the teachers' agencies assert that no one is so exacting as the private school principal in search of a teacher.

In the private school, classification plays a small part and teaching a large part; a pupil is taken to be advanced irrespective of his class. The constant attempt is to create interest and to put on the pupil himself, as much as possible, the responsibility of his own development. Freedom of thought and, as much as possible, of action is encouraged.

The sure dependence of the private school teachers lies in a knowledge of education; if the public become convinced that they understand that, they will be patronized. It is for this reason that THE JOURNAL becomes a most efficient aid to them; in fact, it is indespensable. One of the most eminent principals in this city furnished a copy to each of his eleven assistants saying, "It will pay me to have them read it."

The question was lately asked by an ingenuous young lady, "Shall I study pedagogy? I have an excellent secondary preparation and desire to teach. THE JOURNAL urges a knowledge of the science of education. Most people advise me to get a place to teach at once. One whom I have consulted laughs at my spending any time over Aristotle, Socrates, Comenius, and Rousseau." Nevertheless we advise you to do that very thing. There are but few teachers who know there ever was an Aristotle, Socrates, or even a Pestalozzi. There is more demand for teachers who know of these than the other sort. And such is our candid opinion.

Does the teacher make a business of teaching? A certain teacher is remembered who used to walk to school crocheting with all her might. She would sit down behind her desk still crocheting, watching the clock; when nine o'clock came she called out, "Get your seats now and get out your books." This teacher gave her mind to her—crocheting.

One who teaches must study *teaching;* must surround himself with apparatus, must adapt the school-room to the purposes of education. The time has happily gone by when a man can read law, or study medicine in school hours and be considered even a passable teacher.

I hold this true—whoever wins
Man's highest stature here below
Must grow, and never cease to grow—
For when growth ceases death begins.

The Perplexing Minority.

By WILHELMINE HARTMANN, Washington, D. C.

No school but has some hopelessly stupid childr among its number.

It is true, the proportion of these unfortunates vari according to the kind of neighborhood in which a scho happens to be situated. There are, too, all sorts a conditions of ultra stupid children: the patient plo ding one who has inherited his dullness from gener tions of uneducated ancestors; the one who not parti ularly brilliant in the beginning, has, by years of pe sistent inattention and laziness, lost the power of co centrating his mind sufficiently to take in anything whi is presented to him, and who is only promoted becau his teachers thankfully pass him on; then the frivolo petted one, who, properly speaking, is not stupid b who, because of his butterfly manner of living, is as mu of a dead weight to the rest of the school as though were naturally extremely dull. One day he comes school ill and sleepy from the effects of indigestib food and last night's late hours; the next he is abse half a day that he may take his dancing lesson, and the story runs.

A teacher is especially helpless in this case becau the boy is upheld by parents who quote, "All work a no play makes Jack a dull boy," to all her appeals.

What shall a teacher do with this element? At the ri of being thought an extremist I say—*Let them alone.* course she needs a little time to find the really hopele ones. But as soon as she has gotten that sympathe grasp of her class she must begin to watch herself le she give too much of her energy in trying to awak these torpid minds. The more conscientious she is t greater is her risk of giving strength to them to whi other pupils are really entitled.

Suppose there are, in a class of fifty, five wonderfu bright children, and ten who are so much behind the a erage of the class that it would take months of indiv ual teaching to bring them up to anything near the st dard. Would any teacher dream of depriving the me ocre ones of the class of the attention due them on t plea that it is her duty to advance the bright ones quickly as they are capable of advancing? What rig has she then to sacrifice forty children to the suppos interests of ten?—for sacrifice them she does.

If she tries to give these children the required in vidual attention in school, the other pupils grow restle lose interest, and in nine cases out of ten occupy the selves with something foreign to school work.

Meanwhile what is the effect on the teacher hers and the reflex action on her school? She pours h own vitality into these sluggish minds, while at the sa time every nerve in her reaches out to the rest o school in the endeavor to keep them in touch wit while she struggles with the pupil in question. O day, perhaps, a teacher may bring this phenome pass. But what of the rest of the day and her tion at the end of it?

The vitality which, if properly economized, mig served to inspire a whole school for weeks, has hausted in the effort to make a sluggish mind one isolated fact; for, no public school teac enough strength or time, without wilful negle mass of the school, really to develop the extrao backward ones.

But some one may suggest that individual aic given by detaining those in need of it after t have gone. The objections to this course are known, that it seems almost superfluous to st To begin with, unless the child be a marvel deep-rooted objection to having his time for r curtailed. Even if a teacher manages to overc feeling, the pupil is so fagged by his day in sch his dull mind is less receptive than ever; the has probably taken in during the day, just en what she wishes to teach him, to make it seem story.

The teacher is exhausted by the drain which the u work has made on her, her nervousness makes her cr

and instead of helping the boy, the usual result is that he begins to dislike her and passes from a state of indifference to active hostility.

That bricks cannot be made without straw, is one of the hardest lessons that a young, ardent teacher has to learn. Some never learn it; but until they realize this, and the other important truth that, when it is impossible to develop every pupil they must be satisfied to pursue the course which will do the greatest good to the greatest number, much of their work will have been in vain.

Long Ago Teaching.

About twenty years ago it was discovered that the study of formal grammar by children did not teach them to use their mother tongue with ease. To reach this conclusion required about twenty years of discussion! Then it was decided to "study language," and what did the teachers do? They gave pupils half-built sentences to be completed, or wrecks of sentences to be straightened out, or a jumble of words to make into sentences; thus, "———went home," or "———would——that——him——you," or "boy, the, orange, sweet, a, words, wants."

This went on for a good while and it was supposed a good thing was being done—by some. After a time, however, it was discovered that the pupils took little interest in these things, and really were no more able to write out their thoughts readily and clearly than before the puzzles were put before them. The teacher got to know this as "cut feed" or "cut and dried" language work, and despised it. Some began to hanker for the "flesh pots of Egypt" again; they felt when the pupil learned rules and recited them he *had something*, even if it was of no use to him in life. He could recite the rule and that had the look of knowledge, but after grubbing away at the "cut feed" he was merely filled with the east wind. Still, there was nothing else and so the work went on for several years. Most of those books are laid away to rest; for which let us render fervent thanks. They had a good deal to do with promoting artificial stupidity in the schools. There are not many teachers yet who know what to do to train the pupil in language. There are certain principles, however, that will guide him. First, there can be no training in language concerning that of which the pupil can get no clear conception. Second, the proper training in language is given when the pupil expresses himself orally or in writing concerning things that he comprehends. Third, interest must be created; this is as true of language training for children as of all that human beings need. Fourth, the pupil must be able to correct his own work—that is, know when he is right—in good form; as in arithmetic he knows when he gets the answer. The teacher must train the pupil to do his own correcting; he cannot do it for him. There must be steady practice—the pupil must write a good deal. Not once a

To recapitulate:

(1) Let subjects be selected that the pupil comprehends; let him write about his boots, his dog, his father, his schoolmate, sugar, molasses, potatoes, etc. (2) Expression will become more fluent the more he writes; and knowledge also; and interest also. (3) The interest must be created by the art of the teacher. Praise for well put expressions. A case is known where a few persons came in to hear a boy's composition for several weeks in succession; it created a *furore* and the boy was as proud as a boy that said, "I cannot write a composition." Yes, put art into your dealings with this subject. Don't waste time in correcting compositions; you "correct compositions" don't understand how to give language lessons. (5) From the time the pupil comes in the morning, to his exit at night let him have a pen in hand. Let him write about all the things he studies—provided he understands them all, which is by no means certain. He will learn spelling, for one thing, by this means.

The Primer in Literature.

The prime function of literature, at any stage in the development of man, is to stimulate his imagination and reasoning powers by presenting to him conceptions which lie beyond the immediate reach of his experience. The great consideration to be observed, therefore, in putting literature before the child, is to present, in succession, forms which will appeal to his expanding powers, and in turn enlarge those powers for the apprehension of still larger, nobler forms. One is not to consider so much the gradation from easy to hard words, from simple to more complex sentences, as the application of the law of procedure from the known to the less known, from the familiar objects and notions to the same in unfamiliar relations.

Practically, the task is to find literature for the child, not to make it. The permanent in literature springs from the necessity of the writer to create, not from the attempt to fit the creation to the needs of the reader. A common illustration is found in Robinson Crusoe, which lives generation after generation with the young, though Defoe had no thought of that audience when he wrote the book; while every generation witnesses the death of books written after the pattern of Robinson Crusoe, for the benefit of the young. In like manner, the great bulk of literature prepared for the young is ephemeral, and has no place in the formal education of the school-room. That literature only is to be used there which is permanent, has stood already the test of time, or, if recent, has the unmistakable note of the permanent. Indeed, one of the greatest achievements of the teacher is to fix in the child's mind the distinction between the permanent and the impermanent. To this end every true device should be used, and chief among them I should place these three:—

First, given the piece of literature which is to confront the child, I would have every word, and, if necessary, every phrase in it, familiar to the child before he reads the piece, so that when he comes to read it all mechanical difficulties shall have been overcome; then his mind is free to receive the full impression of what he reads; then reading is a pleasure, not a task.

Second, the drill precedent to this enjoyment should be in exercises, not in literature. The words and phrases which are to occur in literature are beforehand to be combined and recombined in simple exercises of a colloquial nature. By this means, the child comes early to distinguish between reading-matter and literature. These passages of literature occurring at intervals in his book are so many illumined stages toward which he is traveling. I should like to see a primer in which the literature was printed in gold, and the intervening exercises in black.

Third, I would make it a cardinal principle with the teacher not to talk about literature, nor to pick it to pieces. The time for enjoyment through the immediate perception comes early; the time for enjoyment through analysis comes late. I would not even, in the early stages, attempt to connect the literature read with the writers who produced it. I would do nothing to distract the child's mind from pure enjoyment. The greatest help a teacher can render is to read the passage in hand simply and sympathetically, without comment, and above all without criticism. If she can sing it, so much the better."

—*Horace E. Scudder* in *The Atlantic Monthly*.

"The smallest matter thou canst well perform;
The smallest ill.
Of naught but little things
A day is filled, all days are filled,
Our life is filled; therefore do not wait
To use thy wisdom and thy power of will,
Till the great things with sound of trumpet come;
On everything bestow thy ardent zeal,
Thy love, thy faith, thy courage, and thy all."

—*From the German.*

Primary Geographies.

By Abbie Low, New York City.

"The world is round, and like a ball
Seems swinging in the air;
The sky extends around it all,
And stars are shining there."

Fifty years ago this verse was placed in a geography as a lesson to be learned by children. It was committed to memory and recited by the class in concert, with what the teacher considered appropriate gestures.

With the first line the hand, with the fingers extending outward, swept round and round from left to right in a circle. With the second line the hand described the lower half of the circle,—moving back and forth in a semi-circle. With the third, the circular movement was resumed; and the verse ended with the index finger pointing upward, indicating the place where the stars were supposed to be shining.

This was not all of the lesson, it was only the beginning of it, but this verse is sufficient to show that, in common with most primary geographies of the present day, the book commenced the study at the wrong end. Strange that this beautiful science about which there are so many facts that are known to the child,—so many things with which he is already happily familiar,—strange that the study of it should almost invariably begin with the part that is to him utterly incomprehensible.

At the advent of the book referred to, there were not many geographies. This was, perhaps, the first one made especially for little children. In size it was small, not much more than six inches square—small enough to be lifted without fatigue, and to be put away without inconvenience. These books were not only small, but they were few in number, and owned only by the select; so the teacher,—heaven rest her sweet soul,—supplemented the book by having the text committed and recited as described. The rhythm of the poetry and the harmony of movement beguiled the hours and the geography lesson went merrily on.

The author of the much-coveted book was known to little folks as "Peter Parley;" he was a pioneer in primary book-making, one of the first to prepare a text-book, other than the ordinary Juvenile Readers, for young children.

The work was hailed with delight, and so far as his own book was concerned the author was a benefactor; for he opened a flood-gate through which a stream of geographies has poured with increasing volume, a stream now swollen to a mighty river sufficient to deluge the land.

Considered as mere compendiums of geographical knowledge these books are truly a delight to the eye, and to the understanding; but considered as a means of geographical culture for the immature mind they, as a rule, belong to an age long passed. In methods of instruction, many of them—beautiful as they are—have scarcely advanced beyond the day of Peter Parley.

Beginning at the *unknown*, and to the young child the unknowable, they advance by slow and uncertain steps, like one walking in thick darkness, *toward* the *known* at which they seldom arrive. From the form of the earth, and the geography of the hemispheres they circle inward toward the child's point of view; a spot which is not often reached. They ignore the place which the children themselves occupy in "the lap of earth," and withhold any allusion to the relationship existing between the child and the *geo* described. Literally the child himself is *not* in it. So far as the instruction goes, he might well imagine himself seated on the rim of the moon fishing up facts from the earth.

Alas, that this most noble science—this science that should lead all others—should have dropped so far behind them all! That the "new wine" of the sciences should so often be put into "old bottles" of methods or at best, that theory and practice should be so widely divergent! "Ideas before words," is a part of our educational *creed*, yet how often is geography begun with the abstruse statement, "The world is round!"

A Successful Teacher.

(At an institute held in Queens Co. several years ago, the conductor, now superintendent of the schools at Batavia, described the marks of success in teaching. The object was to set up a standard whereby the teacher could measure his progress. Every teacher must have a standard; to move along in a haphazard way is sure to result disastrously.)

"First of all, settle in your mind what teaching is, what education is. Have a distinct and clear idea what you are aiming at. Is it hearing lessons? That will result in good to the pupil, but you should aim higher. There is a mental force in a pupil, put in him by his Creator. Without a teacher that force is likely to be wasted; you propose to convert that force into organized action, so that it may be useful to him and to the world. You are then to be a director of forces that exist in the child, put there for the purpose of education.

Next you are to settle in your mind on what you are to direct those forces to act. Your tendency will be to select a book and say, 'Learn those pages.' Do not do this until it is clear in your mind that such is the best thing you can do, that is best for the child; do not be misled by the routine of the school-room and fancy that if you follow that you must be right.

What does the mind naturally do? It seeks knowledge. You are then to aid the child in seeking knowledge, you are to direct him in his search for knowledge. Here then will come up the question 'What Knowledge is Appropriate for a Child?' Did commissioner ———, when he gave you a certificate authorizing you to teach, ask you what knowledge is appropriate for a child six years old; for one seven years old, and so on? Well he should have done so. You must get a clear idea of this in your mind. This means more than that a child six years old should have a First Reader and one seven years a Second Reader, and so on. It means immensely more than that—why, that is mere mechanics! I am going to tell you some of these things.

Language.—If you really educate a person you will have aided him to obtain a power of expression. Knowledge and expression go together. When you see a person incompetent to express himself you see one who does not possess knowledge. You must therefore strive to give your pupils the power of expression; not only in the reading lesson, but in all the pupil does. Hence questions you are to ask of yourself every day are, Have my pupils improved in language? Do they read fluently? Do they speak readily and accurately?

Knowledge-Seeking.—Your pupils come to you to be directed as to the knowledge they are to seek. I shall suppose that you know what they ought to spend their energies on. If you have selected the right thing for them to study, and if you put these before them rightly, there will be great activity and interest. The next question you will ask of yourself every day is, Were my pupils earnestly, gladly, industriously seeking for knowledge?

You should bear in mind that the error nine teachers out of a hundred make is to confound reciting a statement out of a book with knowing the fact itself. There is the greatest difference in the world between them. The reason 'object teaching' is urged is that the pupil may get facts at first hand. If you ever become a truly successful teacher you will find that you plan to have your pupils find out for themselves. And if you teach aright you will find them full of industry. If they are lazy and indifferent, the fault is yours and not theirs.

In your examination over the day you will be sure to think of the state of mind your pupils possessed, or appeared to possess. They ought to be happy, cheerful, obedient, courteous, helpful, loving to each other, respectful to you, animated with noble ideas, earnest to make progress, admiring the beautiful and great, despising deceit and meanness, aspiring to be manly and womanly, to have clean bodies and garments, to sit and walk handsomely, to act conscious of the over-looking eye of the Father of their spirits.

Now you may not think it to be so, but really these things are more important than the reading, the arithmetic, and the geography. I have seen schools where the teachers aimed at the lessons and cared nothing for the moral, religious, and æsthetic side of the child's nature. Possibly they thought these things would take care of themselves. That is a great mistake. If the forces within us are properly directed we shall grow up to be lovely and of good report. This is what is meant by the expression, "Through nature up to nature's God."

The school-room must cultivate the whole nature of the child, and you should ask yourself every day, Are the souls of these children growing beautiful? Do they love to do right? This will not come through lectures and scolding, never from scolding. Possibly the hardest thing of all that you will undertake will be to cause growth in moral, religious, and æsthetic directions. Almost anyone can make a child learn some lines in a book and recite them; few can say they know how to cause a child to love to speak the truth and to do what is right.

At first you will feel satisfied if the pupils recite their lessons; and I will not despise the results on the child of learning a lesson and reciting it; it has its benefits. After a while you will aim at larger and better work, and will wonder that you ever thought of school-room success except as the harmonious growth of the child."

PRIMARY METHODS

True Victory.

Dost do a good deed,
Do it thoroughly well;
  Leaving no part half undone,
For some other to pick out
The half of thy task,
  And share half the victory won.

The task that is wrought
In a half-souled way
  Is never completely done;
So do with thy might
What lieth in sight,
  For so is life's victory won. —*Selected.*

The Thought Method of Teaching Reading. II.

By EBEN H. DAVIS, Supt. Schools, Chelsea, Mass.

The mode of applying this system of teaching reading by teachers who have made a success of it, may be of interest to other teachers. Suppose, for instance, you have a whole school of fifty pupils who have come for the first time. Everything is strange and a new life is before them. The responsibility of their instruction is great indeed, but greatly lightened when we know how to proceed.

They are very susceptible to their surroundings, and to first impressions. Therefore, everything should invite confidence, and nothing be done to check their naturalness. They should be taught obedience, but not at the expense of individuality. The first step for you to take is to become acquainted with each one, ascertain his powers for learning, then group them according to capacity for working together, for some will be keener of observation than others and capable of advancing more rapidly. These qualities will quickly manifest themselves as we proceed. Of course no teacher would undertake to engage the whole school in recitation at one time, for you could not hold their attention, and children cannot advance rapidly unless you hold their undivided attention. This you must secure in every recitation, and small classes are the best for this purpose. Ten or twelve pupils are enough for any class, and you will find that a group of ten is a more economical division than twelve. This will make five classes in all for reading.

As soon as the school is in order, you will proceed to get acquainted with them individually. You can do this in no better way than by calling them out upon the floor, one group at a time, and talking to them in a kindly and familiar way, asking them about their homes, and recording their names. There will be no special order in grouping, at first, but as soon as possible, they should be graded according to natural ability.

Pleasing objects are very efficacious in securing and holding attention. They are serviceable in getting the pupils to talk without restraint, and, later, for teaching reading. The toys that may be found in stores at a merely nominal price, so inexpensive that any teacher would not hesitate to incur the expense, are available in almost every section of the country. These will catch the eye and rule the attention when other resources fail.

All that you need to accomplish in the first two weeks is a freedom of speech in talking about these objects. These are important lessons, for you are teaching them how to talk,—the very best language lessons in the world. Ideas are awakened by questioning; the answers and the language are in every case to be original. Every answer and every expression, let it be understood, should be in full sentences.

If the object be a representation of a cat, let the questions and answers be somewhat after this fashion:

What have you, John? "I have a cat."

What do you see that belongs to the cat? "The cat has two ears."

What else has the cat? "The cat has two eyes."

What else? "The cat has four feet."

What else? "The cat has a tail."

What else? "The cat has a nose."

You may take the cat, Mary. What else can you see? Look sharp. "The cat has some whiskers."

What else can you see? "The cat has soft fur."

This form of questioning may be continued indefinitely, or changed to asking what the cat can do, what she likes to eat, etc. It is a good plan to ask if each has a cat at home; to describe it, tell its size (measure, by holding the hands apart), its name, color, etc. This they will do without reservation and with evident pleasure.

After you have exhausted the questions about an object, request some pupil to take the object in his hand and repeat as many of the answers as he can remember, in the form of a connected story, but always using simple sentences and repeating the subject in each one. Your ingenuity will suggest other forms of questioning which you can use with good effect, and with the sure understanding that you could devise no better language lessons, nor a better preparation for the lessons in reading which are to follow.

Let us now suppose that you have become acquainted with all of your pupils, can call each by name, and have grouped the school into four classes according to power of intellect, or ability to work together to best advantage. What will be the result? The first three groups will respond to your instruction without much apparent effort on your part, and there will be no very perceptible difference in their attainment. But as you come to the fourth, especially the fifth group, the difference is more marked. If you should bestow no more attention upon these two groups than upon the other, this inequality between them will go on increasing; hence an injustice will be done. The backward children are entitled to the largest share of your attention, for the forward ones are able to take care of themselves if they recite regularly every day.

Let us note some of the physical conditions, of the backward children. The lowest group of all, when they first come to school do not yield their attention as readily as the others, but are influenced most by whatever outward circumstance catches their eyes. While in recitation their minds wander from the subject, and they turn their heads at every noise in the school-room, or stare at some object, often with vacant expression. This must be overcome by increasing your efforts to interest, by keeping your eyes upon them, and by compelling attention by a touch of the hand or word of command. The question which naturally arises at this period is, what to do with the school while one group is at recitation. Simply keep them pleasantly and busily employed. Idleness is the mother of all mischief as is well known, and your power in discipline as well as of instruction will manifest itself in the manner you cope with the matter. We will consider it in our next.

Rest the Children.

"Every sixth or seventh inspiration is naturally a little deeper than the others. But when a person sits down in a relaxed position with his shoulders forward, his lungs do not have a chance to draw in the necessary amount of air, and so nature rebels against the restriction and compels him occasionally to take a long, deep breath in the manner of a sigh, and that ventilates the lungs and washes out the poisons. The process must be repeated as often as he allows himself to collapse into a bad position. Notice a student as he bends closely over his book or slate. Presently he straightens up and does what is considered an ill-mannered thing—he puts his arms to the back of his neck as in the Swedish gymnastics, which brings his shoulders back and raises his chest. It is in fact, nature's antidote for a bad position, and *it is better to encourage school children to do it than otherwise*. If we were more observing, nature would teach us many important lessons in the things which we do automatically."

It was a Boston school child who, on his father asking, "Johnny, are you writing a composition?" replied, "No, thir, a thethith on internathional law, thir; but I cannot continue my occupathion if I am tho conthtantly interrupted with irrelevant inquireth." —*Ex.*

Elementary Arithmetic. II.

First and Second Years.

By E. M. R., Springfield, Mass.

First Year.

Since my last paper teachers have asked, "What shall I give for seat work in connection with arithmetic?" I submit the following as having been found practicable and helpful.

Copy from the blackboard or from cards specially prepared by the teacher and distributed to the children:

one one one one one one

two two two two two two

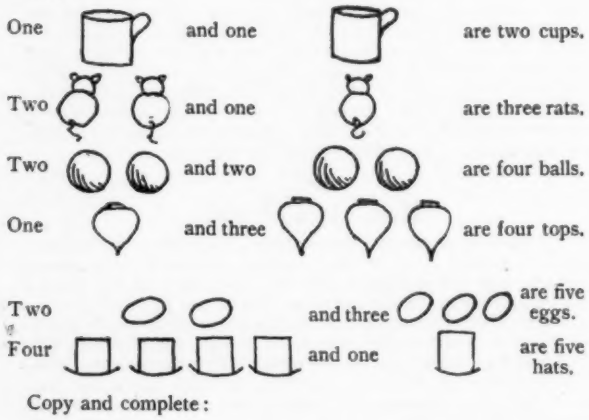
three three three three three

four four four four

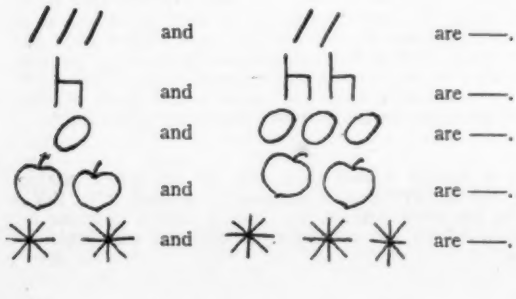
(The number five to be illustrated in the same way.)

The designs on these figures can be of any description, as birds, flags, apples, violets, etc., and can be drawn in pencil or crayon, or pasted upon cards. The earliest work consists in copying, and the thought is always to add the center group with each of the other groups contiguous to it, then show the result in the very outer group. After a few weeks it is best to omit the resultant group and require the pupil to find it and write it in its place.

Copy:



Copy and complete:



For the very youngest class during their earliest work in number you may allow beads to be strung, pegs set in the tile board, or inch sticks laid in groups to show the combination studied in class work. I consider this employment not sufficiently educative for any but the babies when assigned for seat work. If with this work, as in the kindergarten, the teacher could work with the child, the devices could be made much more valuable.

String the beads, cylinders, or cubes, whichever are used, in groups of different colors; thus: four red, four green, four yellow, etc. If a particular combination is to be held in thought as three and two are five, have three red beads and two green ones strung alternately. Place tile pegs in the board according to a similar thought. Children enjoy placing inch pegs or sticks in combination thus, II III, II II, IIII I, III I, especially if allowed to tell about it afterwards.

Be as systematic and exacting in the seat work as in class work. One is supplementary to the other. You have the opportunity to make your seat work add double to the value of your class work. Do not neglect it.

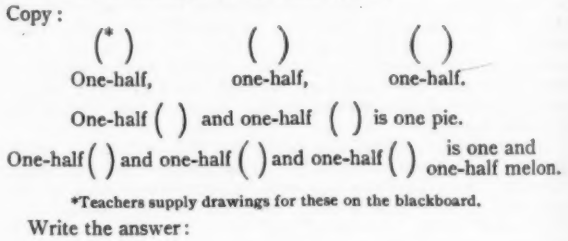
To continue the work outlined in the last paper have group No. 3 study *five*. Present five as a group, with blocks, pictures, sticks, shells, buttons, flowers, dots on number cards. Present five by a succession of ones, as five taps, five steps, five claps, five names of trees, birds, flowers, children, colors, days of the week.

Lead the children to state the facts they find in five. Drill upon, $3+2=5$, $5-2=3$, and $5-3=2$, by having the children give problems with the objects before them to illustrate the conditions of the problems, and by having them draw illustrations on the board for problems given. Test their knowledge by questions which are to be answered without recourse to objects. Do not aim to have the problems confusing, but use two or more conditions and have much variety.

Group No. 2, has finished the study of *five*. Take the fraction *one-half* for the next series of lessons. The children are familiar with the term one-half, but have no exact knowledge of the idea. They will speak of any division as one-half, whether the parts are equal or unequal, or two or more in number. You frequently hear a child say, "It is cut into three halves." He will speak of four or five or any number of halves as making the whole as quickly and positively as he speaks of two-halves making the whole. Any part of a whole is half of the whole to his mind. The object of these lessons is to teach (1) the equality of parts, (2) that two make the whole. Avoid leaving the impression that the cutting line is the "half" or that the boundary line is the "half." Find halves of units first, then halves of groups of units. Complete the subject by teaching that, $\frac{1}{2}$ of $2=1$, $\frac{1}{2}$ of $4=2$. For material, use paper circles, rings, ellipses, ovals, squares, oblongs; drawings on board, as loaf of bread, apple, orange, pie, cake; string of beads, pile of blocks, row of sticks. Provide each child with scissors to make his own divisions into halves.

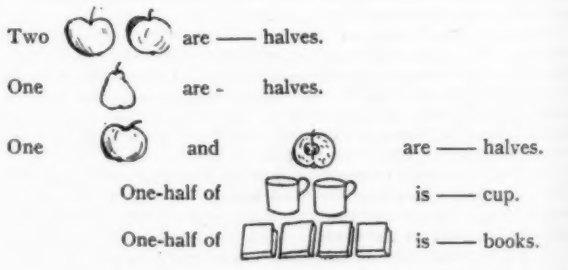
For seat work, fold into halves, strip of paper, sheet of paper, piece of ribbon, envelope, postage stamp, etc.

Copy:



*Teachers supply drawings for these on the blackboard.

Write the answer:



For test problems ask:

If you have four apples and give me half of them then eat one-half of the rest, how many have you left?

If you have a dollar and spend one-half of it, then earn two dollars, how much money have you?

If two dollars will buy a yard of velvet, how much will two yards and a half of velvet cost?

If the cook uses one-half a pound of sugar for each pint of

syrup, how many pints of syrup will two and a half pounds of sugar make?

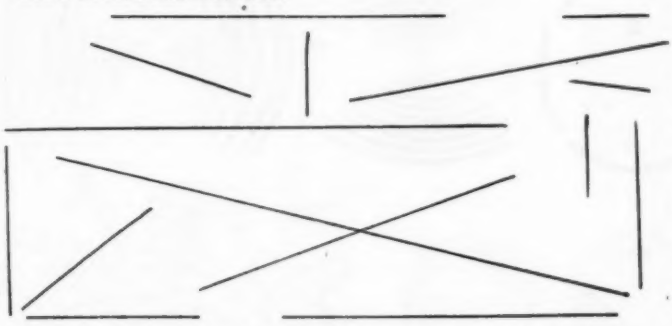
I had three pieces of silk with half a yard in each piece. How much silk had I?

Tom, Dick, Harry, and Ned tied the string they had in their pockets together to make a long line. Tom had one-half a yard. Dick had a yard, Harry had a yard and a half, and Ned had a yard and a half. How long was the line?

Follow the teaching of the half by a series of lessons on the *inch*. For material use inch sticks, inch strips of paper, inch lines, edges of blocks, half-inch lengths, and multiples of the inch. The object is to train the eye to measure an inch so that it can readily be distinguished from a less or greater length. As in the case of the half the children are familiar with the term, but their concept of the length is inaccurate, as is evinced by requiring them to draw an inch line, even with the measure before them. It is most interesting to note that the largest child draws his line too long while the smallest draws his too short. In general the concept is too large and it requires great concentration of effort to approximate the length.

Vary the position of the inch measure presented to the class from horizontal, to vertical and inclined. Have the children draw inch lines in different positions. Compare the inch with the half inch, the two-inch, the three-inch, the four-inch, and the five-inch length. Let them select the inch sticks, the three-inch sticks, the half-inch sticks, the four-inch sticks, etc., until they succeed in always selecting the length named.

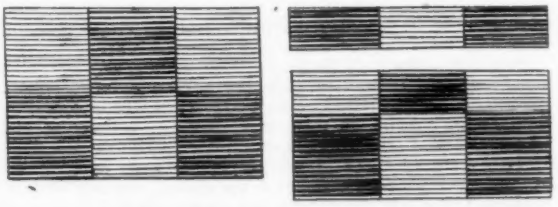
Draw on the board lines thus:



Have the pupil point to the lines that are an inch long, two inches long, etc.

Let the next series of lessons be the *pint*, the *quart*, and the number of pints in the quart.

Group No. 1, in first grade, has been measuring areas using the square inch for the unit, as outlined in the last paper. For seat work the children have written the names of numbers; written statements of facts which have been connected with their class work, as, three twos are six; two fours are eight, etc.; found the area of surfaces by pasting on colored squares, as below:



(The heavy lines are designed to represent color.)

This class is now ready for systematic drill upon facts in numbers between *one* and *ten*. Begin with the number *six*. Let the pupil find all the facts in the number and state them. Drill upon each fact in its order and do not hurry to another until the one before it is impressed. All facts do not need equal drill, the series growing out of six measured by two, needs by far the most drill: $4+2=6$, $6-2=4$, $5-4=2$, $6+2=3$, $3\times 2=6$. Drill by means of problems with recourse to objects, and illustrations on the blackboard.

For seat work illustrate the facts taught in the lesson and write statements of the facts, thus:

○○○○ and ○○ are six.
Four and two are ○○○○○○.
▭▭▭▭▭▭ minus two are four.
Six minus ▭▭ are ▭▭▭▭.
II II II are six.
Three twos are IIIIII.
∠ ∠ ∠ have six sides.

As soon as this class can read from the board the children can illustrate problems that the teacher puts upon the board; until then the seat work follows much the same line as with the lower classes.

After six has been studied take time for the comparison of numbers, to learn, and be able to state, how many more, or how many less one number is than another. Proceed then with the study of seven.

Second Year.

Follow the work of measuring by the square foot which has been taken with the first class in second grade, by study of the number, 16 (providing, of course, that this number was reached last year).

Present the number as made up of a ten and six ones. Analyze it to find the combinations and separations in the number. Have the facts expressed in arithmetical terms as they are discovered. Drill only upon these facts:

$10+6=16$, $16-6=10$, $16-10=6$, $9+7=16$.
$16-7=9$, $16-9=7$, $8+8=16$, $16-8=8$.
$16\div 8=2$, $2\times 8=16$, $\frac{1}{8}$ of $16=8$.
$12+4=16$, $16\div 4=4$, $4\times 4=16$.
$\frac{1}{4}$ of $16=4$, $16\div 2=8$, $8\times 2=16$.

Teach that sixteen ounces make a pound.
Sixteen pints = 8 quarts.
Sixteen quarts = 4 gallons.
Sixteen quarts = 2 pecks.

For teaching the ounce weight, pound weight, and showing the relation they bear to each other you will need scales, weights, and small packages of various weights; as, $\frac{1}{2}$ of a pound of salt, $\frac{1}{4}$ of a pound of meal, $\frac{3}{4}$ of a pound of shot, etc.

Compare the different weights by lifting them. Balance the scale pans by putting a pound weight in one pan and the required number of ounce weights in the other. Apply the knowledge gained in solving concrete examples.

Teach the fraction *one-eighth*. For means use paper circles or drawings on the board. Give the direction to divide into halves. Then to divide each half into halves; then each fourth into halves. It is now discovered that the whole is divided into eight equal parts. Some pupil will volunteer the name of each part and tell that the whole is divided in eighths. Lead the children to discover the following facts:

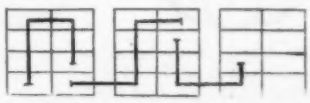
$\frac{1}{8}=\frac{1}{8}$, $\frac{1}{8}=\frac{2}{8}$, $\frac{2}{8}=\frac{4}{8}$, $1-\frac{1}{8}=\frac{7}{8}$, $1-\frac{2}{8}=\frac{6}{8}$, $\frac{3}{8}+\frac{1}{8}=1$, $1+\frac{1}{8}=8$, $8\times\frac{1}{8}=1$, $1-\frac{3}{8}=\frac{5}{8}$, $1-\frac{5}{8}=\frac{3}{8}$, $\frac{5}{8}+\frac{3}{8}=1$, $\frac{7}{8}-\frac{1}{8}=\frac{3}{4}$, $\frac{7}{8}-\frac{3}{8}=\frac{1}{2}$, $\frac{3}{4}+\frac{1}{8}=\frac{7}{8}$, $7+\frac{1}{8}=7$, $7\times\frac{1}{8}=\frac{7}{8}$, $\frac{7}{8}-\frac{1}{8}=\frac{6}{8}$, $\frac{7}{8}-\frac{5}{8}=\frac{1}{4}$, $\frac{5}{8}+\frac{1}{8}=\frac{7}{8}$, $\frac{7}{8}-\frac{6}{8}=1$, $\frac{7}{8}-\frac{1}{8}=\frac{6}{8}$, $\frac{1}{8}+\frac{1}{8}=\frac{2}{8}$, $\frac{3}{8}-\frac{1}{8}=\frac{2}{8}$, $\frac{1}{8}-\frac{1}{8}=\frac{1}{8}$, $\frac{1}{8}+\frac{1}{8}=\frac{1}{4}$, $\frac{3}{4}\div\frac{1}{8}=6$, $6\times\frac{1}{8}=\frac{3}{4}$, $\frac{1}{4}-\frac{1}{8}=\frac{1}{8}$, $\frac{3}{8}+\frac{3}{8}=\frac{3}{4}$, $\frac{3}{4}\div\frac{3}{8}=2$, $2\times\frac{3}{8}=\frac{3}{4}$, $\frac{1}{2}$ of $\frac{3}{4}=\frac{3}{8}$

For drill in this fractional work use cards like the following:

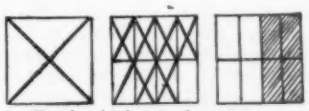
$\frac{1}{8}-\frac{1}{8}=?$	$\frac{3}{4}+\frac{1}{8}=?$	$\frac{1}{8}$ of $\frac{1}{4}=?$

Hold these before the children and require the result, or ask for a problem illustrative of the figure work on the card. To help the children find the answer and verify it to their own minds, determine upon some form of diagramming that will picture the conditions simply and clearly.

To further explain, the addition of seven-eighths, three-fourths and five-eighths may be shown in this way for want of a better way:



The subtraction of two and a half minus one and seven-eighths in this way:



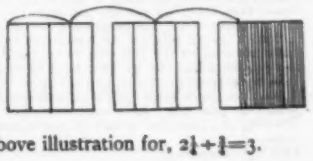
When the lowest class has studied through *eleven* and *twelve* and learned that:

1. Twelve things make a dozen,
2. Twelve inches make a foot,
3. Twelve months make a year,

take a systematic review of the fractional facts taught the preceding year. Begin with the simplest fraction and present it as clearly and logically as though it was a new subject. The amount of drill will be much less than that needed when the "half" was first taught, but the order of presentation should be the same. The facts in one-half are: $1-\frac{1}{2}=\frac{1}{2}$, $\frac{1}{2}+\frac{1}{2}=1$, $1\div\frac{1}{2}=2$, $2\times\frac{1}{2}=1$.

Follow the teaching of one-half with one-fourth. The facts to be taught are: $\frac{1}{4}=\frac{1}{4}$, $1-\frac{1}{4}=\frac{3}{4}$, $1-\frac{3}{4}=\frac{1}{4}$, $\frac{3}{4}+\frac{1}{4}=1$, $1+\frac{1}{4}=4$, $4\times\frac{1}{4}=1$, $\frac{2}{4}-\frac{1}{4}=\frac{1}{2}$, $\frac{3}{4}-\frac{1}{2}=\frac{1}{4}$, $\frac{1}{2}+\frac{1}{4}=\frac{3}{4}$, $\frac{1}{4}\div\frac{1}{4}=3$, $3\times\frac{1}{4}=\frac{3}{4}$, $\frac{1}{2}-\frac{1}{4}=\frac{1}{4}$, $\frac{1}{4}+\frac{1}{4}=\frac{1}{2}$, $\frac{1}{2}\div\frac{1}{4}=2$, $2\times\frac{1}{4}=\frac{1}{2}$, $\frac{1}{2}$ of $\frac{1}{2}=\frac{1}{4}$.

Deal with fractions in all respects as you are accustomed to deal with integral numbers. Have much concrete work, but let the illustrations be as simple as possible in order to save time in drawing them. The picturing of the first year may be succeeded by diagramming with geometrical figures, as in the above illustration for, $2\frac{1}{4}+\frac{1}{4}=3$.



Blackboard Illustrative Sketching.* II.

By W. Bertha Hintz, Normal Art School, N. Y. City.

Questions:—

1. Have you practiced Lesson I?
2. How much time have you devoted to practice?
3. Have you gained confidence and courage in this work?
4. Have you used any of the exercises in your class-room?
5. Are you improving?

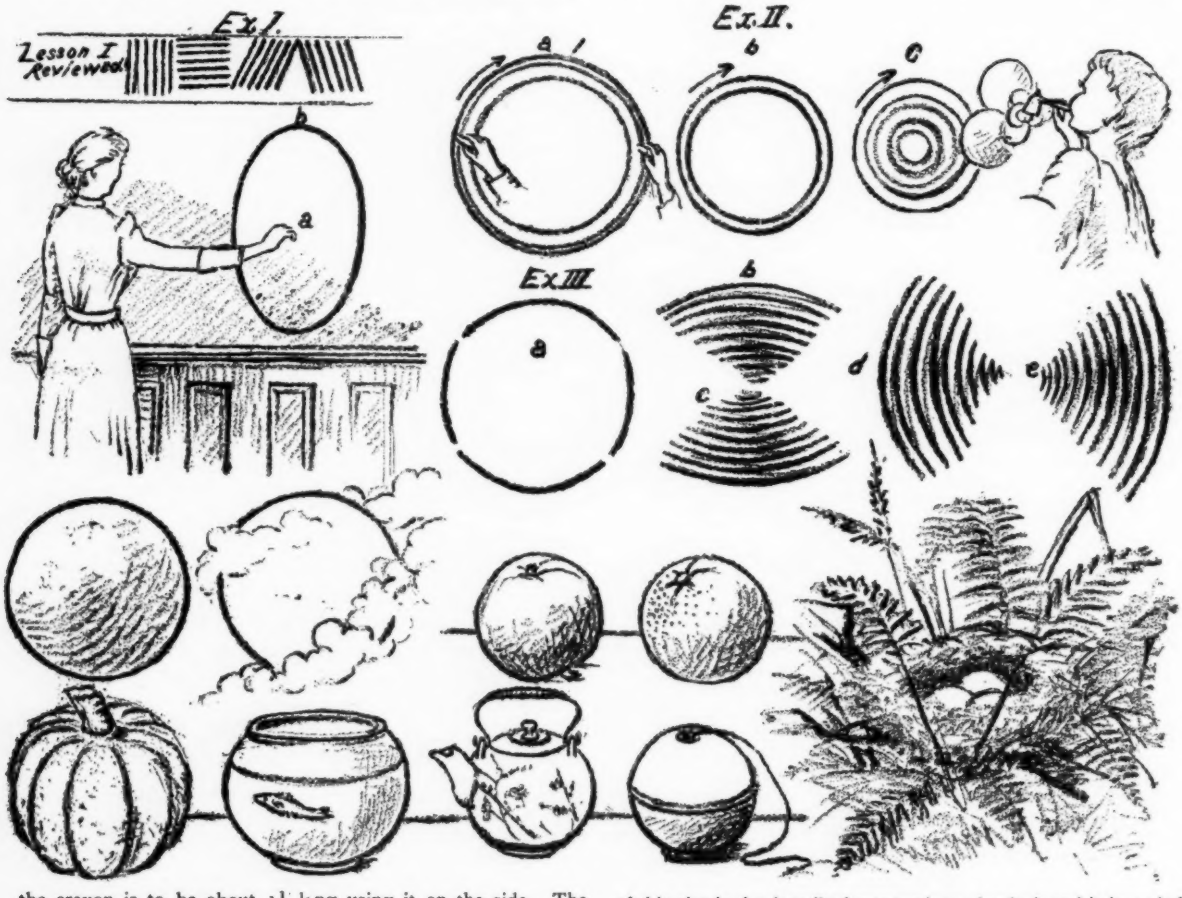
The Use of the Crayon.—For this lesson, as in the preceding, the crayon is to be about 1½" long using it on the side. The strokes then produced will be of a gray, open, sketchy character, showing the grain of the blackboard.

Position of the Body.—Don't stand too near the blackboard. At arm's length is a good distance; but this position is not to be strictly adhered to if found impossible for certain kinds of drawing, and never at the risk of appearing awkward. The body must, however, be quite a distance from the blackboard in order that the work may be well viewed both by the teacher and pupils.

Directions: Place the body firmly. Notice the height of the shoulder; stretch the arm out directly toward the board and at a place about the level of the shoulder. (See Ex. I., a.) From this position move the arm to the left 15", to the right 15", above and below the shoulder level 15". Determine whether this is a distance that you can conveniently reach. This distance must, of course, differ somewhat according to the height of the person.

In all the following exercises, do not try to reach out farther than this determined distance for any one drawing.

The Circle. (*Ex. I.*)—Place the body as in the preceding "directions." Make a mark on the board determining the level of the shoulder. Let this represent the center of the circle. Move the arm out to the left of this center; above it, to the right, and below it, at such a distance from it as has been before determined to be the greatest convenient length the arm can reach. Swing the arm in a circle from left to right, without, however, drawing. When a perfectly even regular motion describing a circle can be produced, let the chalk make its trace upon the blackboard without breaking the consecutive rotation. (See Ex. I. B.) Let all motion be from the shoulder. Do not bend the elbow or wrist while describing the circle. If the circle should be irregular, it will be due to the facts that the arm has not been controlled correctly; has not been steady enough; has not been moving with regularity. The drawing of a circle of this size in the described manner is mechanical, and is intended to be so.



Practice.—Draw ten circles to the counts 1, 2, 3, etc., to preserve regularity of motion. Smaller ones may be inscribed in these large ones by the same method. They will be found to be a little more difficult, as their circumferences will not be limited by the extended arm, as is the case in the large circles.

The Circle. (*Ex. II.*)—It will also be necessary to draw circles, keeping the body to the right of the circles, and arm and chalk pointing to the left, throughout the entire circumference. Practice, (*a*) ten large circles; (*b*) ten smaller ones; (*c*) ten still smaller, and so forth.

Arcs of Circles. (*Ex. III.*)—Rotate the arm as for the circle, (Ex 1), breaking the stroke at intervals. (See Ill., a.) (*b*) *Upward curves;* use the upper arc as an example for the amount of curvature. Practice Ill. b. with a free-arm movement. Forward stroke from left to right must be made with a firm, even pressure; the backward stroke to the left, light but even.

Ill. c.—Downward curves. Reverse the direction of the curve. Begin with the upper short curve. The forward motion from left to right, light; the backward motion from right to left, strong. Keep a continued free-arm movement without lifting the chalk from the board.

Ill. d.—Left curves. Begin at the left; downward stroke strong, and the upward stroke light. Let the decrease in the length of the strokes be gradual and natural.

Ill. e.—Right curves. Reverse the direction of the curve. Begin with the short, left, downward curve. Let the increase of the length of the stroke be gradual. The downward stroke is strong, the upward stroke light.

Application of Curves in the Drawing of Spherical Objects.

Draw a number of circles of various sizes, in quick succession

Note:—It is my wish that you write the answers to the questions in good form in your note-books. Others will be asked from time to time, and this record of time and effort spent in this study, together with reasonable good results achieved, will help to prove the practicability of this course of blackboard sketching. Towards the end of the course reports will be required of the students which will be printed for the encouragement of the future students.

Before taking this second lesson review the first one from memory. If you have not studied the first one, be sure and do so immediately. The interest in the whole work can be best held if you do not allow yourself to get behind. It is my earnest advice to you that you take each lesson as soon as you receive it, and not put it aside for future reference. You will then have the month in which to practice. It is sometimes best to stand to the left or right of the drawing in order that it may be better seen by all the pupils.

with a free-arm movement, using the side of a short piece of crayon. Think of objects that are spherical, that must begin with the drawing of a circle; as a sphere, the earth, an apple, an orange, a cantaloupe, a glass globe, a teapot, a twine-holder, etc. (See Ill.) Determine what additions or changes the circles must receive to best represent these objects. Make these additions and modifications simply as follows: *The sphere:* If the circle only is drawn, it may represent a circular flat disk, or it may represent a sphere. A few lines in shading, as shown in the illustration, however, will give it an appearance of roundness and solidity.

The Earth.—Having drawn a circle with a free, easy motion, draw modified arcs of circles to represent outlines of cumulus clouds surrounding it.

The Apple.—Change the regularity of the circle, as shown in the specimen observed; add a few touches to represent the dried blossom and stem, and some marks characteristic of its surface.

The Cantaloupe.—Draw arcs from the visible upper surface to the lower contour curving to the left and right from the center, to represent the segments, observing the specimen to determine these and other characteristics of its surface, and add a few only.

Glass Globe.—The lower ellipse may be drawn proportionally wider than the upper. The outline representing the edge of the water should curve in harmony with the two ellipses. In order to get on swimmingly with this study the objects must be present.

The Teapot.—This is a truly exhilarating subject, and not so far-fetched as one would at first suppose. It gives you an opportunity not only to handle the crayon, but to crayon the handle, and if you should succeed well you may make a little spout.

Remarks.—In all this practice keep up a buoyancy of spirit, no matter how deep or low the depression from futile attempts. Keep up practicing as though you were getting results truly amazing in the right direction. Begin in the first place by wanting to learn how, then be wilfully, joyously perservering. Sing at the work until it is play. Let your strokes keep time to the music. "You cannot sing?" Why, certainly you can. Every one sings a little, just to amuse himself, almost unconsciously. Draw in the same way. If the drawing is not just right every time, do not stop drawing. If your drawing is not like your ideal artist's, you must not give up drawing any more than you would give up humming your tunes, becaus eyour singing is not like Patti's. You have a right to this entertaining, aye, fascinating means of expression, and you can learn it with a little patience.

First Steps in Language. II.

By JENNIE M. SKINNER, Principal of Alden Street School, Springfield, Mass.

The little children can use the leaves and flowers in their number work. They draw around the leaves and count the flowers; in making original problems these little plants are very useful.

This work also helps in the reading. Many Readers contain lessons on plants which cannot be read understandingly without these previous observation lessons. If you have no such Readers, have the children write their observations, and distribute the compositions to the class to be read. This might serve as the written language lesson for the day.

These plant lessons can be introduced into the seat, or "busy work," by having the children prick around the leaves, after placing them on paper, and then sew the outline in shades of green and olive. Miss Arnold has some pretty cards for sewing prepared for this work.

In the autumn, the children can gather leaves, and make fine collections for winter work. My class mounted a large cardboard last fall, and it hung on our wall all winter. They also made smaller collections for their rooms at home. Before the last frost came, each child brought a maple leaf which he sketched and colored with crayon, making it look as much like the original leaf as possible. Below this picture on the paper was written the development lesson given that day. I hung these bright pictures around the room, and they recalled pleasant associations with autumn days, whenever our eyes chanced to turn that way. This reminds me of a conundrum I once heard: "When is the best time to study the book of Nature? When autumn turns the leaves."

In teaching little children place, position, and direction, it is well to have the pupils move, either by performing an action, or pointing in the direction you indicate. The words near, across, between, opposite, on, above, under, and beneath, should not be taught as mere words, but used by the children in sentences. The teacher places a cat not far from a mat. The child says: "The cat is *near* the mat." Then ask the children to stand *near* some object, and tell where they are; also lead them to place some object *near* them, and give a complete sentence telling what they did. For the word "*on*," have a child stand *on* a chair; put his hat *on* his head; place the dog *on* the mat; etc.

In giving the word "*across*," show lines drawn *across* a slate, and ask the class to tell where the lines were drawn. Also have a string stretched *across* the floor; and a child may walk *across* the room, telling what he is doing.

When a word is once used repeat it often in the same lesson until the children use it. Always be watchful of their language. For "*between*" place an object *between* two other objects. Have a child stand *between* two others. For dictation, you might ask them to draw a picture of a cart *between* a house and a barn.

These first attempts are crude, but I would make only *one* criticism at first.

Show the good points, and "practice will make perfect." The word "*opposite*" sometimes troubles the little folks, unless care is used when it is first presented. Have one little girl sit at the kindergarten table, and place her friend on the other side just facing her. Ask the first little girl to tell you where her friend is sitting, with reference to herself. A sentence containing the word *opposite* is given by the children, and others referring to houses on the opposite side of the street, follow.

In teaching "*direction*," ask the children to show you their right hands (you use your left); put your right hands up as far as possible; faster and faster; left hand; both hands; stretch hands out; stand and raise hands; right foot; all point with the right hand to the right side of the room. What do you see? Draw the picture of the right side of the room. Take the seat to your right; to your left. Place a cube in the upper left hand corner of your desk; move it to the upper right hand corner; center; lower left; lower right; etc.

In teaching the points of the compass have all rise and face, the right hand side of the room. Now show that this is relative but the compass is absolute. The children remember east by recalling the rising sun. Have them walk in the direction they would go to see the sun rise; point to the windows that the morning sun shines in; think of the room at home where the windows face the east. "Let us play we are little trees; the east wind is blowing hard against us; our leaves bend way down, and sometimes turn over when a gale is blowing from the east. (The children bend their bodies away from the east to show how the wind affects the trees.) Soon a storm will come, and some of the little leaves will be blown away from their mother." (The children wave their hands in the air, and bend still farther from the east.) One of the children places a piece of paper on the table and calling himself the east wind, blows it towards the west. *West* may be taught in a similar way, referring to the *setting*, instead of the rising sun. Then come *north* and *south*.

The children make daily observations of the weather in writing, during the first year in school. They tell how many days of storm, and how many of sunshine we have had during the month how many cloudy days, and how many windy days we have had, and compare this month with last.

The lessons in natural phenomena, as rain, clouds, frost, snow, ice, dew, steam, evaporation, etc., are begun in the first year of school. These subjects should be clearly connected in observation, as they belong to moisture, and the effect of heat and cold upon liquids. Thus they are parts of one subject. Language essons can be made very interesting as a sequel to observation essons in this connection.

In studying snow and frost, try to show their crystal forms and shapes of symmetry and beauty. The spherical form of a drop of water or of a bubble may be noticed and partially explained by the children. Some practical lessons on familiar machinery will interest most children; the pump, the windmill, the sail, the steam locomotive, are not entirely beyond the study of children. The *clouds*, like all natural phenomena, can best be studied by observation, either as to the form and motions, their changes and time of appearance, their origin, their use, and their beauty.

Cultivate the æsthetic side of a child's nature by telling him pretty stories connected with the clouds; have them commit verses to memory on these subjects. The children can make experiments of the evaporation of water (as wet clothes drying on the clothes line); the production of steam, the effect of warm and cold air or moisture; the collection of drops of water on the outside of a cold surface in a warm room; the steam or frost on a window; or on the glass of ice-water.

Have the children notice the dew and frost on the plants; call attention to the delicate pearly webs on the grass early in the morning after a cool night; to the fog coming in from the sea after a hot day, or the gathering of a thunder shower. Human body lessons are given each week during the entire course. Temperance physiology, with experiments showing the effects of alcohol, are given in this connection.

I have not yet spoken of dictation and spelling. At first, all the work is in sentence form. By writing the same idiom many times, the pupils become familiar with it, and but one new word is added, as "I have a horse," "I have a rabbit," "I have a doll," etc. In this way the children are taught to express their *thoughts* in writing, without confining themselves so closely to the spelling of single *words*. After this habit is formed, there is no danger of placing the words in columns, and of asking the children to put them in sentences. I usually tell them to put each word into five *different* sentences. Sometimes elliptical sentences are placed on the board, or are given in envelopes for busy work; the children write the sentences, supplying the missing words.

Another way to give this exercise is to show a bell, and have

the children write: "You have the bell." Sometimes the teacher writes the words and the children get the objects and write about them at their seats. Again, the teacher writes: "You may run across the room"; the children perform the action, thus associating the action with the written word. This is silent language. Do not allow bad grammar to pass, usually. Correct mistakes by asking questions. A boy says: "There *was* a great many people there." WERE there a great many? etc. "Yes; there *were* a great many."

The teacher must go around among the pupils and correct a *general* mistake before the school, while the dictation spelling lesson is in progress. The children will overcome sensitiveness, if no partiality is shown. This saves much time in correcting papers that are not always seen by the pupils; for in our crowded school work, there is not time to have everything re-written.

Primary Lesson in Form.

By E. H. W., Trenton, N. J.

I wonder how many in this class like watermelons? Almost all? Well, perhaps some of you have never noticed the usual shape of a watermelon. Those that know the shape may tell me by the motion of their hands without saying a word. Now we would like some one to tell us in words.

"It is the shape of an ellipse."

How many think the same as Sadie? So many hands? Well, we will see. (Teacher shows a paper ellipse and a wooden ellipsoid.) Now, which of these two is the more like a watermelon in shape?

"The wooden one looks more like a watermelon."

What do we call the wooden one? "That is an ellipsoid."

I am glad Amy hasn't forgotten the name we had yesterday. Now all think of some fruit or vegetable the shape of an ellipsoid.

"A plum is an ellipsoid." "A yellow tomato is an ellipsoid." 'Some egg-plants are ellipsoids." "White grapes are ellipsoids."

Yes, and there are others. But to go back to what Sadie told us "that a watermelon was the shape of an ellipse," we cannot say she is entirely wrong. If I asked Nellie to draw a watermelon on a piece of paper, to cut it out and bring it to me, what would she bring me? "She would bring you an ellipse."

Kate, Maud, Helen, and Lillie may each draw a picture of a watermelon on the board, while Richard and all the boys in this row may quietly get a paper from the desk, and see how nicely they can draw a watermelon with just one line. The neatest and best I will get some little girls to cut out.

What has Kate drawn on the board? "Kate has drawn a watermelon."

Is it an ellipse, or an ellipsoid? "She has drawn an ellipse."

What has this little girl cut? "Mary has cut an ellipse."

What am I holding in my hand (model)? "You are holding an ellipsoid."

If Tom should walk in this room with a long watermelon, what else could you tell me of the shape? "It would be an ellipsoid."

If a number of the pupils should bring in to-morrow, any of the fruits or vegetables that we have mentioned, or anything like this (model), what shape would they be? "They would be ellipsoids."

Who can tell me the difference between the surface of an ellipse and the surface of an ellipsoid? "The surface of the ellipse is flat, and the surface of the ellipsoid is round."

Harry may tell me something of the surface of the ellipse on the board. "The surface is flat."

What of this surface, Rose (paper ellipse)? "That surface is flat."

Of this, Rob (model)? "The surface of the wooden ellipsoid is round."

What about the surfaces of the fruits we have mentioned? "Their surfaces are round."

We will not ask anyone to bring any fruits, or vegetables for ellipsoids, to-morrow, but I would like all those who think they could cut a real true ellipse, about the size of a small watermelon, to bring it to me to-morrow morning.

(The papers brought next day, after a short review of the previous lesson on form, will serve as excellent material for a number lesson in teaching $\frac{1}{2}$ and $\frac{1}{4}$. The cutting and distributing of the imaginary watermelon will be more interesting than the dry numbers, for the first lesson in fractions.)

Lessons in Primary Geography.* II.

By A. E. MALTBY, Ph.D., Slippery Rock, Pa.

On her way to school Jennie came through the pasture. As she opened the large gate, I saw her drive back the cows that tried to run out into the road. Mr. Smith put the cows in there to eat the grass, Freddy says. "It is not very good now, and I *guess* they were going up to the barn because the weather is cold." You little Yankee, to guess. What did they want at the barn? "I think they wanted some hay, Miss Clay." Mary says that in the meadow, across the road from the pasture (Fig. 1), the cattle were not allowed to eat the grass as fast as it grew. "When it was very tall, father mowed the grass and made hay." What did he

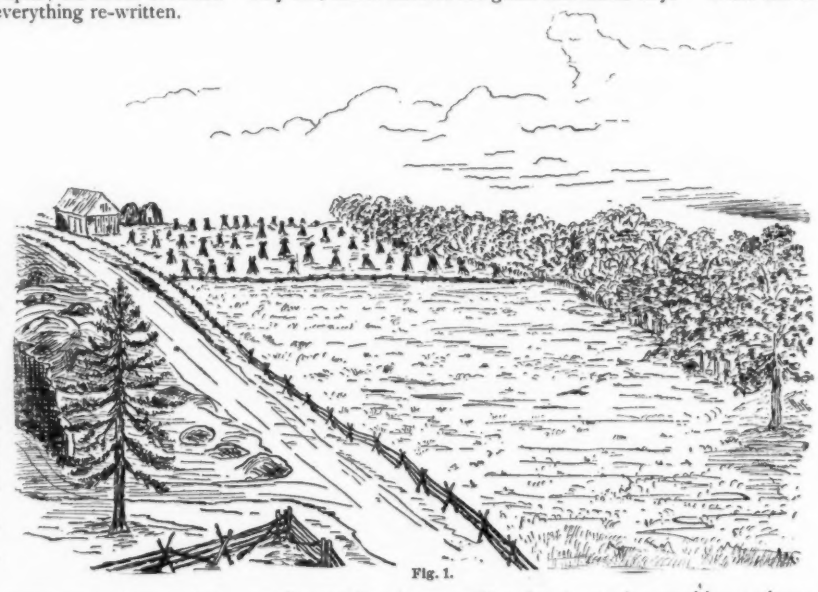


Fig. 1.

use for mowing the grass, Kate? "A mowing machine, perhaps; father used one in his meadow." "So flat that the horses could draw the machine anywhere." "No stones."

When you look over the pasture and meadow can you see other differences? "The pasture is rough and hilly." "It has briars and bushes, but the meadow has none." What are hills? "Where the land rises up." "Where the land is higher than the rest." The sides of the hills we call slopes. "Smith's hill has a very gentle slope." James says it is not so on all sides. "Where the road leads into the quarry." "Where stone is taken out for the walls of buildings." "One of Uncle Frank's sheep fell over those rocks last week." Well, Kate? "It goes straight down." Let us call the place where it goes straight down a sharp slope, or an abrupt slope. "Uncle Frank said that the sheep fell over the—the—" Did he say it fell over the *precipice?* "Yes, Miss Clay; that's what he said. It fell over the precipice, and the hill is very steep there." Carrie? "After Mr. Smith had cut the grass in his meadow, some of the hay was put into the barn, and the rest was piled up back of it." "The sheep were turned into the meadow to eat the new grass." Why did not your uncle put the sheep into the lower lot, James? "He said it was too wet. Sometimes when I go down there after the cows I send Rover to drive them out of the swampy part. Grandpa says that when he came to the farm all the land which is now meadow was swampy." How did it change so much? "He dug ditches to run the water off." Well, Charlie? "Father uses *tiles* when he drains land." "But he must put them under the ground."

Yes, that is so. When there is too much water it must be drained off into a brook or other stream if we wish to raise good crops on the land. "Some land is too rough and stony to be plowed, and is only fit for pasture." What did Mr. Smith plant near the barn? "Corn and potatoes." "In the field are many big pumpkins." "Orange-yellow." "The corn was cut a week ago." What do we call the piles of cornstalks as they are set up in the fields? "We call them shocks." Soon the corn will be husked, and the bright ears taken to the corn-crib. "Meal is made from the corn." "Father feeds corn to the pigs."

We have named so many kinds of land that we should write out a list of them:

Meadows, Marshes,

Pastures, Quarries,

*Copyright, 1892.

Hills, Cornfields,

Swamps, (Woodlands.)

You may copy these words when you go to your seats. Yes, George, "there is one kind we have not written yet," *woodlands*, and I will put that at the last. You may write under it all the new kinds you can remember. Do not name any more now. (Busy work.)

Let me see your picture-maps of the pasture, the spring, and the brook. Some have put in the fence, the trees, and the hill. Ruth has drawn grass and rushes. (Fig. 2.) We shall soon learn to make good maps.

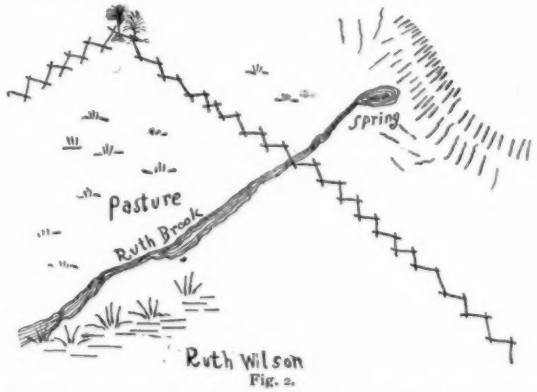


Fig. 2.

(Made by a child about eight years old. The sketch is not perfect by any means, but shows a child's natural tendency to conventionalize drawing into set maps. Notice the manner in which she represents slopes.—A. E. M.)

Uncle Frank's poor old sheep fell over the precipice. Our little brook runs out of the pasture, too, joins the big creek, and falls over a precipice. "That's the falls." (Fig. 3.) "Tom and I were down there fishing, last Saturday." What do we call it? "A waterfall." Some people call large waterfalls *cataracts*.

Fig. 3.

Here is our lists of words for the waters. Mary may name one, and then write the word neatly upon the blackboard.

Spring, Creek,

Brook, Milldam,

Stream, Lake,

Waterfall or Cataract.

Nature in the School-Room.

By SARAH E. SCALES, Lowell, Mass.

Children should early be trained to observe systematically, noting cause and effect. In THE SCHOOL JOURNAL, January 9, '92, I gave an outline which we used in school for weather observations. After a little we have enlarged our daily record by adding natural history facts, which they find or observe in their daily life. Some of these may seem trivial to an adult, but one should remember that the horizon of the child is limited, and little things seem large and important, if near to the heart of the child.

To show what I mean I append specimens of records made by third-year primary scholars. The idea is to require at least one original sentence indicating observation, daily. The specimens are fac similes of the September reports. Each child has a book of its own, and all keep a record.

LOWELL, MASS.
Sept. 12, 1892.

Monday:

School begins to-day, and it is pleasant. Wind S. E. The temperature is 68° this morning. I shall look again at 2 P. M. The corn we planted in the school-yard has ears on it. It is tall. The sunflowers are all out, and I saw a yellow and black bird getting seeds from them.

JAMES W—.
Age 9 years. Third Year.

LOWELL, MASS.,
Sept. 14, 1892.

Wednesday:

The weather is stormy. The temperature was 60° when I looked at 8 A. M. The vane points to S. E. now. When I came to school, the rain made a little brook in the street.

I think the storm bell will ring, as it rains hard.

ANNIE M—.
Age 8 years. Third Year.

LOWELL, MASS.
Sept. 22, 1892.

Thursday:

The weather is fair to-day.

The temperature at 8 A. M. was 58° and at 2 P. M. 68°. The vane on the round house pointed to W. this morning. The days are as long as the nights now.

I saw some frost on the boards.

I found some white cocoons and brought them to school and put them in a box till spring.

WALTER S—.
Age 9 years. Third year.

LOWELL, MASS.
Sept. 23, 1892.

Friday:

The weather is pleasant. It is warmer than yesterday. I looked at the thermometer and it was 64° at 8 A. M., at 2 P. M. 72°.

The wind is S. W.

We saw a purple butterfly in school to-day, and the case it was in.

I found one just like it the other day. I saw some hawks.

RICHARD B—.
Age 8 years. Third year.

These specimens will indicate the line of thought I have intended to convey. They are not given as models, only as suggestions.

Almanacs indicating changes and movements of sun and moon can be obtained of any druggist, free, and can be utilized in this work. Cut out each month as it comes, and paste in record books.

Opening Days.

A TALK AMONG TEACHERS.

By ANNA B. BADLAM, Dorchester, Mass.

It was the close of the first week of school, and a little group of teachers stood discussing, as teachers will, the "hard places" along the road of teaching.

"I can't help it; I just *hate* myself and everybody else to be shut up on these lovely September days in a close school-room trying to keep fifty little urchins still," said a quick, petulant voice.

"O, Jessie's begun her hating fever," laughed some one pleasantly.

"Well, I can't help it. If you had my quick, impatient temper, and my temperament you'd realize how I feel the confinement of the school-room after the long, idle, dreamy days of summer."

"Look at Gertrude; what *is* she writing?" Gertrude turned from the blackboard with a mischievous smile and read,

"I dreamed one night that life was *beauty*;
I woke one morn and found t'was *duty*."

"A sermon, a sermon," cried an eager voice. "Let's have a 'Round-Robin' sermon. Sue, you begin."

Sue hesitated for a moment; and, as the quick color flushed into her cheeks, said, "It has sometimes seemed to me after I have gotton over some of the tired feeling of the year that there was a good deal of beauty in even so prosaic a matter as the *duty* of one's life as a school teacher. Perhaps I ought not to use the term 'prosaic' for I find a good deal of poetry when my soul is attuned to my work."

"That's just the point that troubles me," said the teacher who had complained of the restraint of the school-room. "How is one going to keep one's soul in harmony with one's work when discord holds sway in one's midst in the school-room. The children feel it, too, poor little atoms! Did you ever try sitting on a hard, wooden seat, for two or three hours on a lovely, glorious, enticing, September day, and turning your eyes longingly to the open windows yearn to be out in that pure, fresh, exhilarating air? How would it seem to you to be recalled to the matter-in-hand by the words, 'Eyes on the blackboard; you mustn't look out of the windows,' and to have your thoughts brought back from the delightful out-of-door life to such interesting (?) facts as, 'I see a cat, The rat ran?' Or, to be forced to gaze at '*one ball and one ball*' when you *know* perfectly it 'makes two balls?'

"Or, if by chance, you slip down in your seat to be brought up to a stiff-backed position by the words, 'Sit up straight'? I tell you I don't wonder the new comers play truant, or run away at recess. I would, if I dared."

"O, Jessie, you arenot half as fierce as you seem! Don't I know under all that fault-finding manner of yours you hide a real heart-ache and a disappointment at your failure to reach the standard you carried with you from your normal school? Come, let's go back over the week and see where the trouble lies. You know one can always undo a knot or a tangle in a thread by patience and perseverance, and I propose to unravel this knotty point——"

"Better call it 'naughty,' and done with it," interrupted a whimsical voice, "We might say we were all sorry and were willing to be forgiven and would try to do better."

"Well, knotty or naughty, as you please; seriously, I feel that our work ought to hold more of '*beauty*' than it does. It is a 'noble calling,' not much *glory* in it, if one looks at the present, but the *present* 'stretching on' will make the *future*. Suppose we discuss a little the work expected of us, and see how we can make big Jessie, and all the little Jennies and Jimmies stop *hating* school on these lovely days. We can't change the opening of school, and we can't go to the fields and the woods. What can we do?"

"'If the mountain won't go to Mahomet, then Mahomet must go to the mountain,' won't apply, surely, here," said a droll voice.

"True," said a quiet speaker, "but have you ever thought how like Gulliver, we are, caught napping till we are bound hand and foot by innumerable bonds of 'red tape'? We consult the course of study; con its pages; peer anxiously into the visionary results of examinations, and prospects of promotion months ahead in the future, and are oblivious to the material at hand for study scattered by nature's loving hand at this gift season of the harvest."

"Yes, but what is one to do? The work is laid out by some one in authority; so many words to be taught the first month, so many the second, etc.; just as if each child's brain were a measure to hold so much of any one subject," said an indignant voice.

"True," the same quiet voice went on, "but I judge these same authorities are, in the main, reasonable beings, and, if some short-sighted individual has given you a list of words to teach, I see no reason why you should teach *snow, ice, sled*, and such words, as *coast* and *slide*, till the appropriate time comes."

"You mean, 'seize the opportunity,' don't you?"

"Yes, that's just the idea; only, I had not thought of so apt a way of putting it into words. It seems to me that if we '*seize our opportunities*' we shall have less constraint in the school-room; there will be an increased interest on the part of the children; they will be ready and willing to come to school because it is the pleasantest place they can spend their time in."

"I'd like to '*seize some* opportunities,' just now, and learn how all this is to be accomplished," said a skeptical voice.

"Shall I speak from my experience?" continued the quiet voice. "I made the mistake in my early days of teaching, just as every teacher will, at first, of seeing in my children only so many hands and feet to be controlled, so many little brains to receive their daily portion of the work laid out for the grade; and, in my enthusiasm over results for the term limits of study, I was oblivious of the fact that to do effectual work one must educate the *soul* of the child, awaken his poetic nature, appeal to his love of the animate, and bring before him all the gifts of spring or summer, autumn or winter, that nature bestows so lavishly. What need to seek for a '*vocabulary*' for your reading lessons when a variety of words, suggested by the objects themselves (and many of which can be brought into the class-room), can be utilized for language and reading.

"The nuts, leaves, grains, fruits,etc., are ready at hand, and how much more interesting for a child to read from his object, and, later, from the written expression,

Here is a nut,
It grew on a tree,
It is a brown nut,
It is a ripe nut,
I can crack a nut, etc.,

than to be confined to many of the uninteresting sentences with which he frequently struggles, and over which he grows weary in body and mind. One need not confine one's instruction within any set limits; for nature is expansive, and the topics she suggests are manifold. Not only must one '*seize the opportunities*,' but one must keep one's teaching in *harmony* and *sympathy* with *the seasons*, and the secrets of nature unfolded in the school-room by the skilful teacher will be of intense interest to the little ones whose eyes need to be opened to see correctly, and whose minds and souls must be awakened to a knowledge and conception of the beauty and the utility of the world about them"

There was a moment's silence, as the speaker's voice ceased, and, though every face looked serious, the shadows of the week seemed to have fled, and "the sunshine of interest" flooded the hearts of the little group, and shone forth in the eyes.

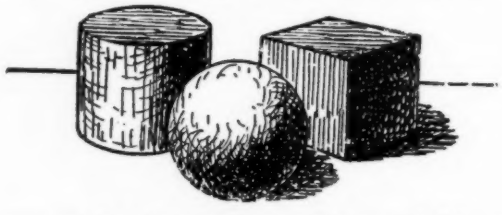
"Sponge it all out," said an irrepressible voice, yet with a tell-tale tremble in it; and, as the full comprehension of the seemingly ridiculous words dawned upon the minds of the hearers, a look of quiet resolve came upon their earnest faces while they answered, heartily, with one voice, "We will, and will start afresh on Monday morning."

Fairy Children Three.

SPHERE, CYLINDER, AND CUBE.

By CLARA THOMPSON, Cambridge, Mass.

Once there was a dear fairy mother who had three of the funniest little fairy children you ever saw. You never would have guessed that they were any more than blocks of wood, and nobody but their mamma knew just who they were. The little fairies did not look a bit alike only they all wore clothes of the same color. Johnny cube, the biggest, was fat and clumsy and could



not run a step, but always had to be pulled or pushed by some one else, but mamma said that he was a real comfort, and she kissed his six flat faces, six times a day. The reason she kissed him so many times was, that she never could hug him, his eight corners and twelve edges were so very sharp.

Willie Sphere was a funny little rogue, with just one round face. He never could keep still one minute unless he was asleep or snuggled in his fairy mamma's arms, and mamma could cuddle him as closely as she pleased, for he had not one sharp edge or corner to hurt.

Little Sister Cylinder was very nice too. She had two flat faces on either of which she could stand and play with Johnny Cube, or she could turn over on her one round face and run a race with Willie Sphere.

Now these little fairies would have been the happiest people anywhere, if they had not sometimes forgotten to be good and kind. In pleasant weather Mrs. Fairy often walked with her children in the woods. One warm afternoon in the fall, after the nuts had begun to ripen, all the fairy family were sitting under a big chestnut tree when into the woods came a white horse led by an old man. Both looked warm and tired. As they walked along the man patted and talked to his horse, and this is what the fairies heard. "Dear old fellow, we must find a spring of water, but my poor old legs are too weary to tramp long in search of it."

Quickly Willie Sphere rolled himself down the bank and into the brook, making such a splash that the old man heard it and soon found his way to the bubbling water. Making a cup of his hands, he reached his head down to drink as much as he wanted; then he thought how he could carry some to his horse. "For," said the old man, "old Dobbin's knees are too stiff to let him walk down this steep bank, my hands will not hold enough for him to drink, and if I fill my hat it will be empty before I get half way to him."

Then Cylinder who sat on the bank above changed herself into a pail which the old man soon filled with water and carried to Dobbin, who had been nibbling the sweet grass. "Ah! sighed the old man, you are more fortunate than I. We have both had water and may rest under the trees, but you have eaten a hearty meal, and I am still hungry."

Then Johnny Cube, who lay near, changed himself into a wooden box and begged the chestnuts above to drop down and fill him. "For," said he, "the old man is too short to reach your branches and not nimble enough to climb."

Then the chestnut tree shook her largest branch and sent her chestnuts rattling down into the box. They made such a clatter that they woke the old man who had fallen asleep. When he saw the box he was very much surprised. After eating as many nuts as he liked, the old man filled a bag with nuts and placing it on the horse's back, both left the woods.

Then mamma fairy called her little ones to her. Cylinder and Johnny Cube obeyed at once. Willie Sphere rolled and tumbled, but could not get out of the brook, until a beautifully speckled trout tossed him out upon the grass, and a kind old bull-frog gave him a push up the bank, and he rolled panting into his mother's arms.

All that afternoon the fairies had such a good time. Mamma fairy knew they were happy because they had tried to make some one else happy. Willie Sphere could not always lead an old man to the brook, but there was always some one who needed help and these little fairies were always the first to find it out.

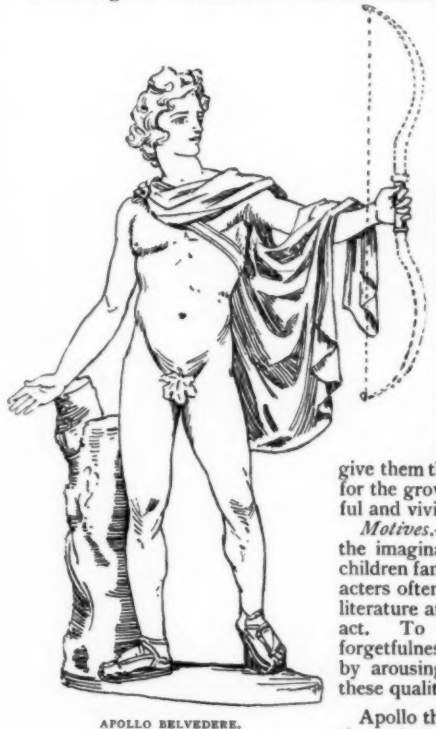
Greek Myths for Children. II.

By Emma M. Firth, Chicago, Ill.

APOLLO AND THE PYTHON.

This myth may be told by the teacher or read by the pupil. It can be used as a language lesson, the pupil being encouraged to reproduce it orally, or on paper.

It can be given in connection with observation lessons on the weather,—rain, dew, frosts, fogs, etc.



APOLLO BELVEDERE.

All modern tendencies are to make children too realistic; and to stifle rather to cultivate the fine imagination necessary to the enjoyment of all that is best in literature and art.

By presenting these myths, the product of a primitive people, and therefore simple and beautiful, we give them the best material for the growth of a healthful and vivid imagination.

Motives.—To cultivate the imagination; to make children familiar with characters often referred to in literature and expressed in act. To encourage self-forgetfulness and heroism, by arousing admiration for these qualities.

Apollo the beautiful was the god who carried a silver bow, and a quiver full of golden arrows. He was as brave as he was beautiful, and as kind as he was brave. One day he saw that the people down upon the green earth were very unhappy about something. This made him sad, for he liked to see them always cheerful and happy. He came down into a green valley where a river ran laughing toward the sea. He stopped near a house in the doorway of which sat a little blue-eyed boy who was sobbing as if his little heart would break.

When Apollo asked him the cause of his grief, he pointed to a far-away blue mountain, and said, between his sobs, that a great dragon lived in the mountain caves; that at night, when people were asleep, he came silently down—breathed upon them with his poisonous breath, and in the morning they did not awaken. He told Apollo that his dear mamma was yet asleep, that he had been calling to her, but that she did not answer Apollo shot a golden arrow into the room · then, brushing his hand over the boy's golden curls he said, "Laugh and be happy, little one; the dragon shall never come again!"

Then the little boy heard his mother's voice calling to him very softly. He clapped his hands in glee and ran into the house.

Apollo climbed the steep craggy sides of the mountain, and looked carefully into all of the many caves which he found. At last he found one which was larger than the others. He shot a golden arrow into the darkness, and there, fast asleep, was a hideous serpent coiled in an ugly heap. The cave was filled with a thick fog which had an unpleasant odor. Apollo stood at the door of the cave and carefully aimed an arrow at the huge flat head. Whiz—z—! It pinned the head to the earth and though the Python lashed its tail about and sent into the air so much of its poisonous breath that even the brave sun-god had to hurry away from the cave, it was but a short time before the arrow had done its work, and the Python was slain.

THE PARTHENON.

How happy the people were! They sang songs in Apollo's praise, and over the cave, where he killed the Python, they made a beautiful temple. They had many games in his honor. These were called the Pythian games. Do you see why they called them by that name?

There were chariot races, foot races, quoit-throwing, wrestling, and the performing of many feats of strength by the tall handsome young men. The winner of a game was called the victor. He was crowned by a wreath of beech leaves* and was more proud of his crown of leaves than a king is of his golden crown.

Long ago a great sculptor made a statue of Apollo to put in the beautiful temple. No one had ever made so beautiful a statue, and no one has since then made one as excellent. It is called the Apollo Belvedere. It was found long years after it had been made, not far from the great city of Rome. It was put into the Belvedere of the Vatican. That is why it is called the Apollo Belvedere. The Vatican is a beautiful building in Rome. The Apollo Belvedere shows us how the sun-god looked just after he had killed the Python. He has just shot the golden arrow, and seems proud and happy at the thought of having done a great deed for the people of the earth.

Do you know who Apollo really is? We see the beautiful sun-god every day; but we do not think of him as the Greeks did. He still drives across the sky in his golden chariot, making the fields warm and fruitful with his arrows, the sun's bright rays, and filling the earth with warmth and cheer. Did you ever see the fog curling up from a low marshy ground like a great serpent? The marsh sends up poisonous vapors, but the sun's rays send them away. The poisonous marsh gas is the Python which is destroyed by the sunlight.

In connection with this story the children will be interested with a picture of a Greek temple. They may compare that style of architecture with some of the modern types, and even very little children can be made to see beauty in the Greek temple. Its simplicity will appeal to them.

The story of the Colossus of Rhodes might also be given in connection with the Apollo myths, since it was dedicated to the sun-god, and as one of the seven wonders of the world will be a helpful addition to their knowledge of facts which, having thus a definite connection with history and literature, will be accordingly useful.

*The laurel was afterward sacred to Apollo.

Little Helps.

A little spring had lost its way along the grass and fern,
A passing stranger scooped a well, where weary man might turn;
He walled it in and hung with care a ladle at the brink;
He thought not of the deed he did, but judged that toil might drink.
He passed again, and lo! the well, by summers never dried,
Had cooled ten thousand parching tongues, and saved a life beside.

—*Selected.*

The Teaching of Drawing. II.

By Heman P. Smith, N. Y. Normal Art School.

Drawing has its greatest use in that it necessitates a study of *form;* it requires close observation, and observation is the study of life.

In The Journal of Sept. 3 we presented a few general principles, and indicated the first steps in the teaching of form. Type solids should be studied first, because they are of more perfect form, and serve as types by which all objects, whether natural or artificial (made objects) may be collected, compared, and classified.

Models.—To teach form properly in the first three years of school-life, each pupil should be supplied with the following models:

First year.—Sphere, cylinder, cube, half-sphere, half-cylinder, half-cube.

Second year.—Half-sphere, half-cylinder, half-cube, circular plinth, triangular prism, square prism, and square plinth.

Third year.—Flat spheroid, long spheroid, ovoid, cone, pyramid.

Details of form.—In teaching the details of form the use of tablets will be a valuable aid to the pupil; let each pupil have a supply of tablets cut from press board, four or six of each kind, the same size and shape of each face of the different models, (the outside part of a model we call *surface*, that part of a surface which is limited by *edges* we call a face).

After studying a model, the number of faces, the shape of its faces, the position of its faces, the relation of its faces, let the pupils select from their tablets those of same shape as the faces of the model and find as many of them as there are faces in the model: *i. e.*, if the model is a cube select (1) a square tablet (like one face), (2) find as many tablets of same shape as there are faces on the cube: (*a*) rest the cube on one of these tablets, (*b*) cover each face with a tablet, (*c*) lay the tablets down from the right, left, front, and back faces; then remove the tablet from the upper face, placing it to the right or left of those already placed; remove the cube and let the pupils count the number of faces on the cube, then count the number of tablets. By this exercise their judgment will be trained, they observe the number of faces a cube has, and they observe the shape of each face. The use of tablets will add interest, and will aid the pupils in their study of the different shapes of faces. Another device or means of study may be to have the pupils cut paper to represent faces. Supply each pupil with thin paper such as is used for paper folding. There are three ways of securing this, each adapted to a certain stage of the work:

(1) Press the paper upon the face of the model to be cut, so as to obtain creases to guide in cutting.

(2) Trace around the face with lead pencil, then cut on the line.

(3) Cut free hand, judging the size and shape by careful observation.

A third device or means of studying details of form may be to have the pupils trace around the edges of a tablet with lead pencil the different faces of a solid.

We have suggested three different means of expression for the pupils to use in the study of form:

1. Expression by use of tablets.
2. Expression by cutting in paper.
3. Expression by tracing about the edges of the tablet.

This should precede drawing; first the pupils should study form and make use of these different means of expression that they may have a clear conception of form before they attempt to express with pencil by drawing.

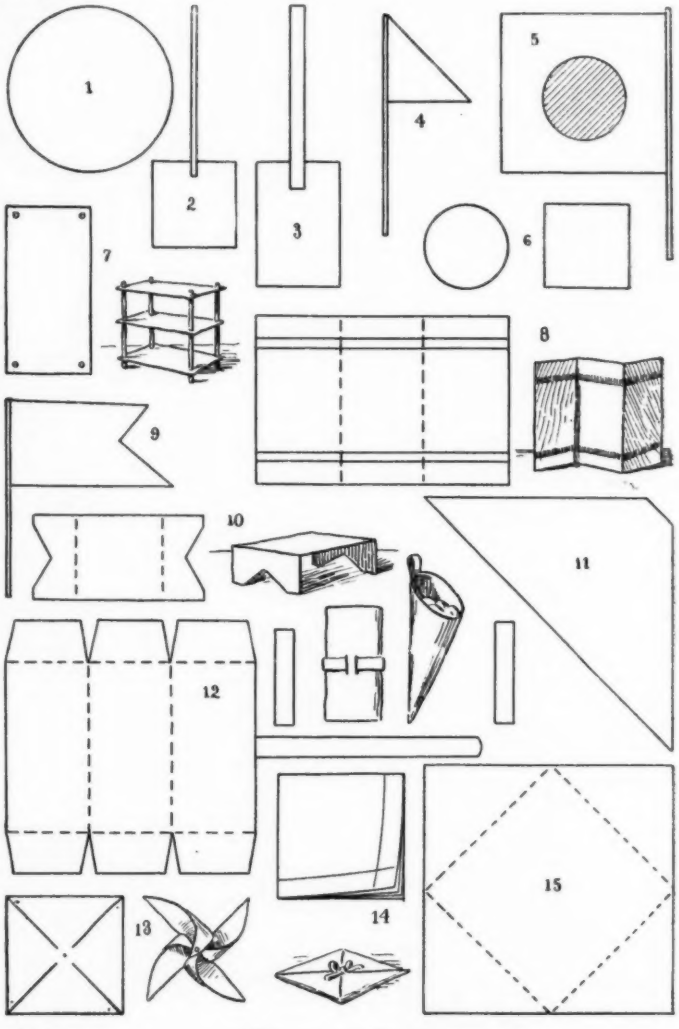
In the first year of school life modeling, tablet-laying, paper cutting, and tracing should be the means of study for at least twenty weeks before teaching the use of the pencil.

Directions.—Work out your lessons before attempting to teach a class.

Have the lessons short and often, *i. e.*, in first year, *daily* of fifteen minutes, if possible.

Vary the exercise; one day study the model by handling and describing; another day make the model in clay; at another lesson study its parts, and express with tablets; at another lesson study its parts and express by cutting in paper. You are teaching form as the basis of all art instruction and these different means of expression will lead the pupils to observe with care, and prepare them for the more difficult means of expression, which is *drawing*.

Have the pupils make familiar objects by folding and cutting in paper. Frequent application should be made of their work; this will lead them to look for and find objects which are oblong or square, circular, triangular in shape, etc. The illustrations in the accompanying plate will suggest how these applications may be of a very elementary character, and yet awaken much interest and lead the pupils to observe and apply their work of the school-room.



Phonic Busy Work.

Mark off a sheet of bristol-board or card-board into squares measuring three-fourths of an inch, and print a letter on each square before cutting out. Mark the vowels with one dot, and the consonants with two. Have the entire alphabet repeated at least three times and there should be additional sets of the vowels, *a*, *e*, *i*, *o*, and *u*. Distribute these to the children and ask them to spell a list of words (which the teacher has placed on the board), using dots only, in this way:

Slate : : • : •

Pestalozzi had a class of twenty-five pupils in Burgdorf, from five to eight years of age. He caused the pupils to draw lines, curves, angles, and squares on their slates; he gave them drawings to copy. One was a picture of a window. "Could we not as well learn from the window itself?" said the boy. "The child is right," said Pestalozzi; and now he put away his drawings and used objects.

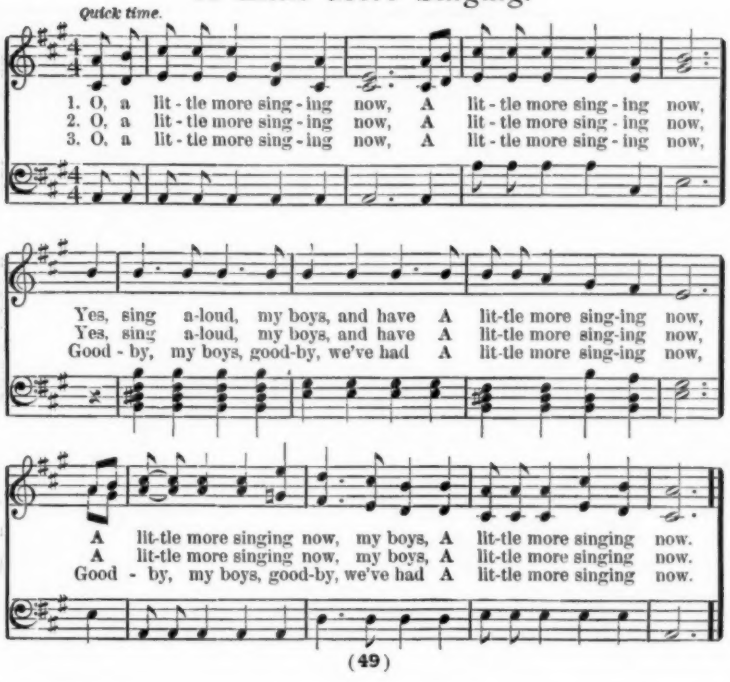
Pestalozzi, it is apparent, was a very practical man in the school-room. He employed movable letters to teach reading, slates to teach reading, writing, and drawing; and tablets, on which units were represented by dots, to teach number. All these were his own invention. Ramsauer, one of his pupils, says: "All his teaching started from language, number, and form; he had no plan of studies nor limit of time. We had neither books nor copy-books; we learned nothing by heart."

"School teachers hasn't any feelin's at all."

"What is the matter now?"

"My teacher borrowed my new knife to sharpen her pencil, so she could give me a demerit mark. —*Ex.*

A Little More Singing.



(49)

Stories for Reproduction.

Every fall the Bennett children sweep up the leaves on the lawn. Every morning before school they gather them, and after they come home they sweep them up again. Some Saturday afternoon when the leaves are all done falling their father lets them make a bonfire. It is a jolly sight to see the big red blaze and the children dancing around it.

Grandma loves sweet clover, and every day this summer Benny and Clara have picked a big bunch for her. "What will grandma do without her sweet clover this summer?" said Ben. "We will pick a great lot, and stuff a pillow with it," said Clara, "then she can have it ever so long."

Mrs. Brown was taking up her house plants and putting them in pots for the winter. Anna helped and her mamma gave her a very pretty rosebush for her own. There was one red rose on it, and three buds. Anna carried the plant to school, and put it in the window-seat.

Tommy and Teddy are twin brothers. Their papa has a funny name for them. He calls them the two T's. If he comes in and does not see the boys, he asks, "Where are the T's.

Little Amy went to walk with her big sister Ida and gather flowers. Amy thought that October was too late to find any flowers. But they filled their basket with the dear yellow goldenrod and pretty purple asters and red autumn leaves. "I think I like the golden-rod best of all the flowers," said Amy because it stays with us so late.

The teacher's name was Miss White. She was very sick one afternoon. The children in her room were so sorry for her. They walked very softly. Gracie brought her a glass of water; Rob pulled down the shade so the light would not hurt her head. Lillie ran home and asked her mamma for some headache medicine to take to the teacher.

May and Jennie each had a new slate pencil. They were in Jennie's school bag. The little girls went to school hippity-hop. Jennie stumbled, the bag fell, and broke both pencils. "My nice pencil is broken," said Jennie, crying. "I have two pencils instead of one," said May, laughing.

The leaves had worn their plain green dresses all summer, but when September came they began to put on their gay fall clothing. When October came the trees were all gay with yellow, crimson, and red. The leaves felt very proud of their fine dresses, and they talked to themselves, saying, "How fine I am! How much prettier than I was dressed last summer!"

The old tree overheard them, and he sighed so hard that some of the gay leaves fell to the ground. "Do not be too proud of your fine dresses, my children," he said. "These bright colors are the sign that you will not cling to the old tree much longer. One by one you will fall on the ground, and I shall be left bare and lonely." And the old tree sighed again.

Minnie had a new pocket-book. It was a pretty red one, and Minnie was very proud of it. She kept opening and shutting it nearly all the time, and before she had had it a whole day she broke the clasp. Uncle Frank was sorry for her, and he mended it for her.

When Willie was walking through the woods one day he saw a little baby rabbit. It was brown and white and very pretty. Willie took it in his hands and patted it. The poor little thing was very much frightened at first, but when it saw that Willie did not mean to hurt it, it lay quietly in his hands. Then Willie put it on the ground, and it hopped away.

Out in the orchard papa was picking the bright red and yellow apples and packing them away in barrels. Willie was standing by, and he thought he heard the apples saying that they did not want to be put in the dark barrel. They wanted to hang on the tree in the sunshine. "I am sorry for the apples," said Willie, "but they were made to be eaten." And he took a bite from a big one he had in his pocket.

Primary Reading.

By ALICE KRACKOWIZER, Englewood, Ill.

Apropos of observation work as a means of teaching reading, I should be glad to add one suggestion regarding the practicability of bringing literature into close relation with the above.

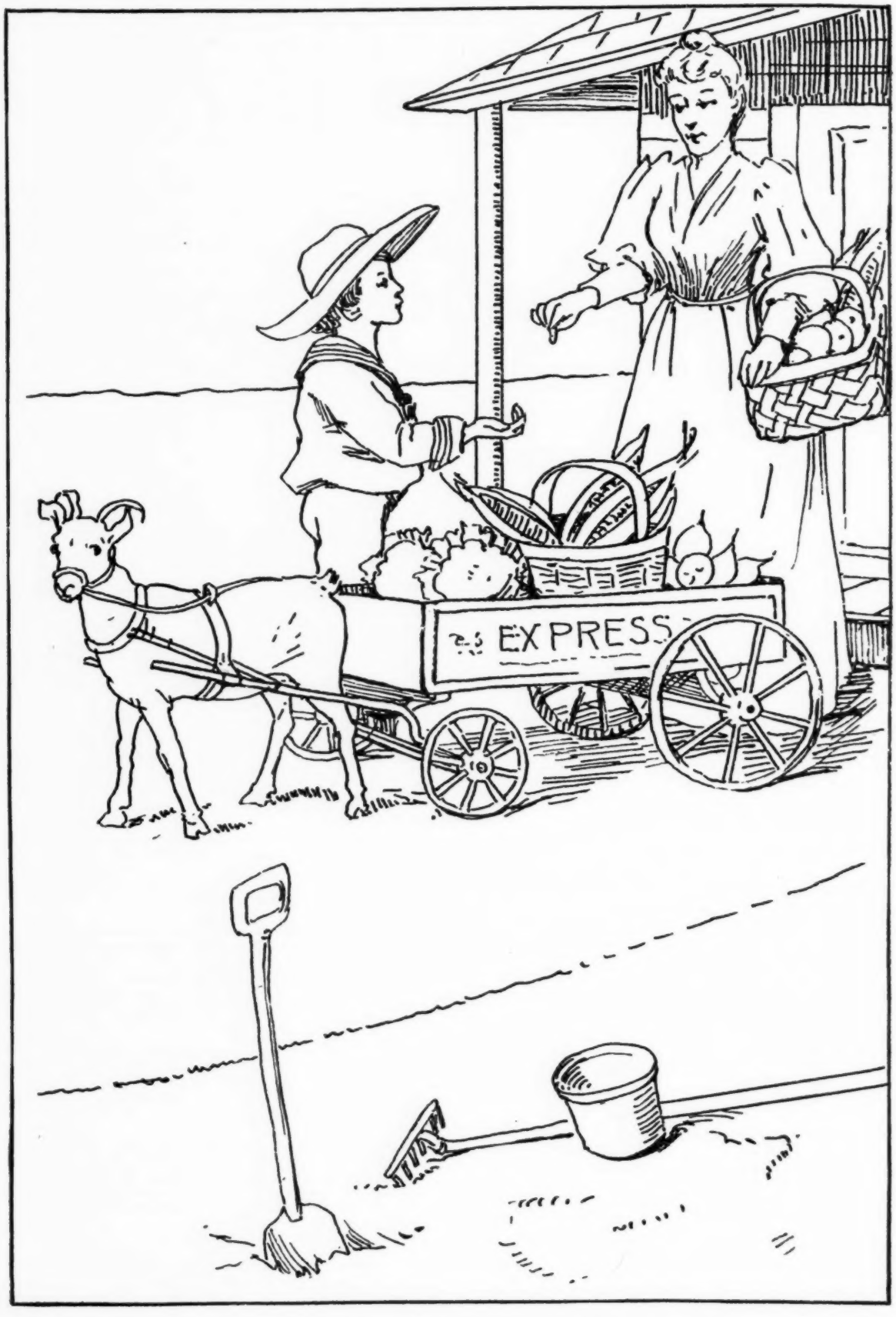
We had studied a number of fruits, had carried on for a long time observations on the changes of the sun's position, and on other apparent changes of season, and then took up the story of Proserpina, together with observation work on the pomegranate.

The following is a sample of the reading lessons which we obtained, and which we had printed on separate slips for the use of the children:

The Pomegranate.
Do you see our pomegranates?
Do they not look like apples?
They grow on trees.
Apples and peaches grow on trees.
Cranberries do not grow on trees.
The rind of our pomegranate is red, yellow, and brown.
The orange rind has little sacs in it.
The pomegranate rind has no little sacs.
We saw no juice in it.
See how round the pomegranate is.
How many seeds the pomegranate has!
There is some skin around the seeds.
There is some juice inside of the skin.
There is some good, sweet juice in it.
Are pomegranates good to eat?
I think they are good.
Do you like them?
The seeds are pointed at one end like apple seeds.
Are grape seeds pointed at one end?
Yes, they are.

PROSERPINA.

Proserpina was a good little girl.
She had a good mamma.
Her mamma's name was Ceres.
Proserpina saw a red flower.
Did she take the red flower?
Where did Pluto take her?
Ceres went home.
She did not find Proserpina.
She went to the nymphs.
She went to Apollo.
Did Apollo send Hermes down to Pluto?
What did Hermes have on his feet?
Proserpina said, "I ate six pomegranate seeds."
Ceres said, "You must stay with Pluto for six months."
Did the trees and flowers grow when Proserpina came back?



Picture Stories for Language Work. I.

These pictures are made large enough for children to see them across the room.

Picture Stories for Language Work. II.

Suggestions for a General Columbus Exercise.

FOR THURSDAY AFTERNOON, OCTOBER 20.

(For pupils of the grammar grade on the day preceding the regular Columbus day anniversary, Oct. 21.

Upon the blackboards may be sketched the Spanish and American flags crossed; the coast of Spain showing Palos and Huelva; the route taken by Columbus coming to America; the ships of Columbus; the lost anchor; the map Columbus used; the convent of Santa de la Rabida; the old church at Palos; the portrait of Columbus; the Columbus badge; the Italian monument in N. Y. city, or anything that will heighten the interest in the subject.)

There is a great deal of interesting and instructive matter now in print concerning the approaching Columbus anniversary, and it might be well for the schools to gather up many of the items for a general, informal exercise, in which all may unite in voluntary offerings of information, on the day before the formal set exercises. Such a general occasion of "talking over" the present and prospective events connected with Columbus in the great exposition would be popular with the children, and the teacher can throw the entire success of the occasion on their ingenuity and ability to search for bright things.

Notice might be given a week beforehand that such an exercise would take place, and the rest may be left to the resources of the children. If they choose to introduce some well-known patriotic songs, or a bit of healthful fun, they could be trusted not to overstep their privileges, under a sympathetic, tactful teacher who knows how to manage children without any suspicion on their part that they *are* managed.

While the whole occasion should be characterized by freedom, enthusiasm, and alertness, yet any suggestions like the following would be in order from the teacher:

Every pupil who gives any piece of information must be prepared for a fusilade of questions from any in the school, lasting but a minute or two on matters directly connected with the subject in hand. This will set the children to tracing out all the branches of information that may grow out of the facts they present in order to be ready for the attacks of the inquisitive audience.

To prevent any mixing of miscellaneous matter, it would be well to classify it under three general heads, being careful to finish one before undertaking the next:

I. Preparations in this and in other countries for the Columbus Anniversary. *This includes only such preparation as is connected with Columbus alone*—not the exposition as a whole.

II. Columbus at the World's Fair.

III. Different views of the character of Columbus.

THE SCHOOL JOURNAL donates the following items of information for the benefit of teachers and pupils with its best wishes for the success of the occasion.

Preparations for the Anniversary. 1.

Celebration in Spain and Italy.

Most of the cities of Spain will celebrate the Columbus anniversary by local festivities, but the grandest display next to that of Madrid, will be at Huelva. This is a comfortable Spanish and English town of about 20,000 people. It has a wonderful hotel called the Columbus hotel, in four great separate parts with a tropical garden in the middle; the bust of Columbus is over the door. It was here that Columbus left his little son Diego, when he went on his first voyage.

The convent of La Rabida has been put back into the primitive condition in which it was at the time it was occupied by Columbus. Columbus stopped at the convent because it was the tavern, the asylum, the place of supplies and of kindness. The prior was Juan Perez, of Marchena, a name illustrious next to Columbus'. He was the priest who entertained the stranger and discoverer. He stands above the Spanish priests of every kind because he belonged to the republic of inquiry and intellect. That country monk set him on his career, for among the several confessors of Queen Isabella it appears that he had been one. Juan Perez went all the way to Granada to have the navigator recalled. He was the good Samaritan of the New World.

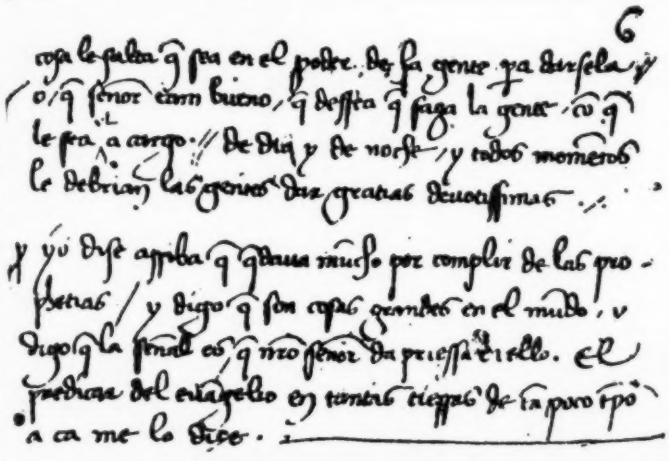
The celebration began in Madrid, Aug. 2, and will continue till Oct. 14. The alcade of Palos to-day is a lineal descendant of the alcade in 1492 who saw Columbus weigh anchor at that time. Why Palos was selected for Columbus' departure is a question. Spain had few seaports in that day, as the Moorish kingdom of Granada took up nearly all the seacoast from Gibraltar inward to Valencia and Aragon. Cadiz, San Lucar, and Palos were the three Atlantic ports of Spain, all outside of the Straits of Gibraltar. The little port of Palos was the most secret of all, the nearest to Seville, concealed from Spanish gossip and Portuguese spying, and by running four miles from the village Columbus would be at sea. He slipped out an hour before daylight on Aug. 3, 1492.

SPAIN.

A formal announcement of the beginning of the festivities was made by heralds going out on the streets with trumpets and cymbals. There is a legend that says that it was in this way that the announcement was made Aug. 2, 1492, that Columbus would set sail for the Indies.

A great excursion was planned to go to the convent of Santa de la Rabida, led by three boats named *Pinta*, *Nina*, and *Santa Maria*. There was a grand illumination and banquet at the convent. Services were held in the church where Columbus knelt in prayer the night before he started.

The city of Genoa enters with great enthusiasm into the festival. Last May under the auspices of Ligunan Gymnastic Society Cristoforo Columbo, a bronze wreath was place at the base of the Columbus monument which was erected in Genoa, in 1862. At the feet of Columbus the figure of America is kneeling. The wreath weighed 500 pounds, and was carried by a figure representing Genoa seated on a triumphal car. There were 7,000 members of the society present, and 50 bands of music. Genoa is rich in the relics of Columbus, and the city made a great gala occasion of the day.



HAND-WRITING OF COLUMBUS.

From Fiske's "Discovery of America," by permission of Houghton, Mifflin & Co.

At Madrid, an immense building designed for the national library will not be used as such until after the Columbus celebration. It will first be utilized for the art, literature, and science exhibitions to be held to commemorate the discovery of the New World.

An entire floor of this large building will be reserved exclusively for American exhibits. A special commission has been appointed by the United States to proceed to Madrid.

Besides the most interesting contributions and co-operation of the South American republics, Mexico will send the treasures of her museums of antiquities, of art, and of science. She has voted $100,000 to cover expenses. Every nation of Europe, including Turkey, promises co-operation. The Pope is to send everything in the Vatican relating to the discovery of the New World, including the celebrated bull of Alexander VI., the Spanish pope who drew the lines of division of the possessions beyond the seas of Spain and Portugal. Austria and France will send their most interesting relics of art and science.

The authorities of the Canary islands, reminding the Centenary committee that Columbus touched at those islands on his way to discover the New World, request that the three caravels, *Pinta*, *Nina*, and *Santa Maria*, should also touch at those islands on their

way out to America next year. The committee has promised that this shall be done.

Every few days come glowing reports of the festivities over the ocean. The royal family enter into the spirit of the occasion and attend in person upon great occasions.

King Humbert, the Prince of Naples, the Duke of Genoa, and others of the royal family are taking part in the festivities. They recently visited the American ship *Newark*, at Genoa where they were received with full honors. When the captain presented the ship's officers to them both the King and Queen cordially shook hands with each. A drill and march past was then witnessed by the royal guests, King Humbert congratulating his entertainers on the fine appearance of both ship and crew.

Columbus Monument.

This is a gift made to N. Y. city, by the Italians of that city. They have been very enthusiastic about it, and sculptors and artists in Italy have been greatly interested in it, and the Italian government raised the money for it in a short space of time. The idea originated with Carlo Barsotti, the proprietor of the Italian newspaper *Il Progresso Italo-Americano*. The artist is Gaetano Russo, a celebrated Italian, who will superintend the erection and unveiling of the statue.

The monument is seventy-six feet high. There is a column of red granite twenty-seven and a half feet high, on the top of which will be the statue of Columbus fourteen feet in height.

There has been a great deal of pains taken by this artist to get a correct likeness of Columbus from the earliest paintings and engravings of the great sailor. It represents Columbus standing in an easy attitude with his left foot slightly forward. His left hand rests on his hip, and in his right hand he grasps firmly the helm of the ship. He is dressed in simple garments, falling to the knees without any ornament or folds, and a long coat with fur on the front. His face looks strong and undaunted as though his courage was not shaken in the least.

From the pillar of the monument there project 6 prows of bronze and bronze anchors like those carried by the fleet of discovery.

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Columbus Monument, presented by Italians to New York City.

There is a central inscription "A Christoforo Colombo" in a beautiful combination of color.

The following inscription will be placed at the base of the monument:

To
Christopher Columbus
the Italians resident in America.

Scoffed at before,
during the voyage menaced,
after it chained,
as generous as oppressed,
to the world he gave a world.

Joy and glory
never uttered a more thrilling call
than that which resounded
from the conquered ocean
in sight of the first American island,
"Land! Land!"

On the XII. of October, MDCCCXCII
the fourth centenary
of the discovery of America
in imperishable remembrance.

Columbus Arch.

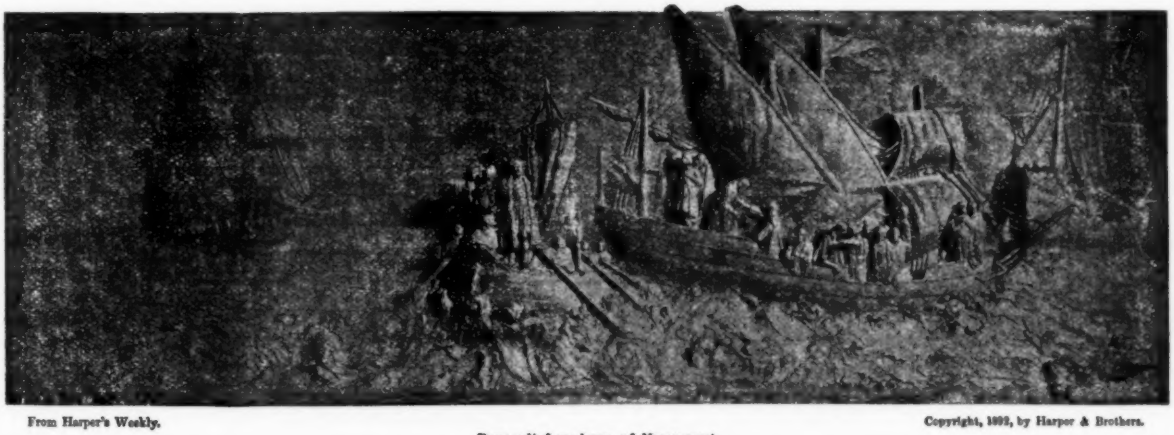
The Columbus arch in New York city is a temporary arch erected at the entrance to Central Park. The best design for this was made by a young man only 21 years old, named H. B. Hertz, in the department of architecture in Columbia college. It is intended to put this monu into marble at an expense of $350,000. In front of the piers will be four polished columns on pedestals. The surface between the columns will be richly decorated with gold and mosaics, representing Columbus at the court of Spain. Upon the branches of the arch will be immense figures of victory.

At the base of each pier will be a huge fountain of marble in which the water will flow by day and varied color electric lights will sparkle at night. The figures of the fountain will represent Immortality, Discovery, etc.

On the central panel is the inscription:

THE UNITED STATES OF AMERICA.
In Memorial Glorious to
CHRISTOPHER COLUMBUS,
Discoverer of America.

The crowning figure of the arch will be an allegory in bronze, a group of twelve figures with the Genius of Discovery standing and trumpeting, the figures being arranged in and around a boat.



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Bass-relief on base of Monument.

Underneath these, and on the base proper, will be the bass-reliefs which are said to have been the delight of all the sulptors and artists who have seen them. The first shows the discoverer and a chosen few leaving the ship in a small boat to land on the shore of the unknown land discovered by them. The boat is in the middle of the foreground. Columbus faces the spectator. He stands in the bow with an ecstatic expression on his face. His left foot rests on the gunwale of the boat and around him are grouped his friends. The rowers sit facing the bow. The *Santa Maria* lies astern to port, and the *Pinta* and *Nina* are in the background.

The other bass-relief represents the landing. On the shore, with the mysterious space of ocean limitless behind him, Columbus stands with thankful face uplifted to heaven. On the left, two sailors are dragging the boat up on the beach. This monument was shipped to America in one-hundred-and-seventy-five parts.

Triumph of America.

New York city will carry out its share in the great anniversary in an elaborate manner. The principal feature will be a display known as the

GRAND PAGEANT.

It will consist of twenty large "floats," intended to illustrate the progress of the country in civilization, and the arts and sciences from the prehistoric period and the time of the discovery down to the present day. It is to be out-of-doors and will represent a series of pictures by a line of twenty "floats" illuminated by electricity. Preceding and following each float will be groups of personages eminent at various periods of American history. At the beginning of the pageant will appear a group of mounted heralds sounding the coming of Columbia.

The first float will represent our hemisphere, over which will appear the flying figure of Fame sounding America's pæan of praise, and around which will be figures representing Europe, Asia, Africa, and Australia. Following this first car will come a group of early savage tribes, surrounding and supporting the float, showing America in prehistoric times. Next will come a car bearing a typification of the classic art of Mexican-America. The Toltec pyramid will stand in the center of the float, and elsewhere upon the car will be shown a group of the priests of Popocatepetl offering sacrifice to the sun. Different tribes of the Toltec race will follow in the group behind this car, and here also will be seen representative chiefs of the red natives of North America, including the Crow, Pawnee, and Mohican nations upon the dawn of civilization.

Behind these there will be a float with Columbus' ship, the *Santa Maria*, borne by Spanish sailors. This will be followed by the cortege of King Ferdinand and Queen Isabella, composed of Spanish cavaliers and Ladies of Honor. Behind the king and queen will appear the statue of Columbus, bearing aloft the emblem of Christianity, which he offers to a new and untaught world. This statue will stand upon a naval pedestal and above his head there will be a figure of History crowning him with laurels. The Genius of America, supported by allegorical figures of Italy and Spain, will ride before this float. A great troop of red Indians, bearing fruits, grains, and other products of the new land, will swell the triumph of his procession. After this will come another group representing the Spanish invasion, including Amerigo Vespucci, Vasco Nunez, Ponce de Leon, Pizarro, Cortez, and others. Then will come Sebastian Cabot, Hendrick Hudson, and, following swiftly, representatives of the early Dutch and English colonists. The Mayflower Pilgrims, William Penn, and others will represent the colonial period.

Next the Spirit of Liberty will appear to the colonies, surrounded by figures typical of the various countries to which America owes her colonization and growth. These types include representative immigrants of every nation—Celt, Gaul, German, Slav, Latin, Ethiopian, Arab, Moor, Mongol, etc. The float of Liberty will be followed by a group of riders representing Washington, Lafayette, Jefferson, Franklin, John Hancock, Jay, Adams, and others. On the float representing the newspaper press of New York will be a great printing press surrounded by suitable figures to represent the various papers. Then there will be floats for Science, Poetry, and Literature (with appropriate figures), and also appropriate devices symbolizing woman's place in modern civilization. Another float will typify the oceans, steam navigation, and submarine telegraphs. Among the attractions also will be Columbia's Ship of State. A great troop of girls will compose the Battalion of Progress. Besides, there will probably be floats representing Wealth, Mines, etc.

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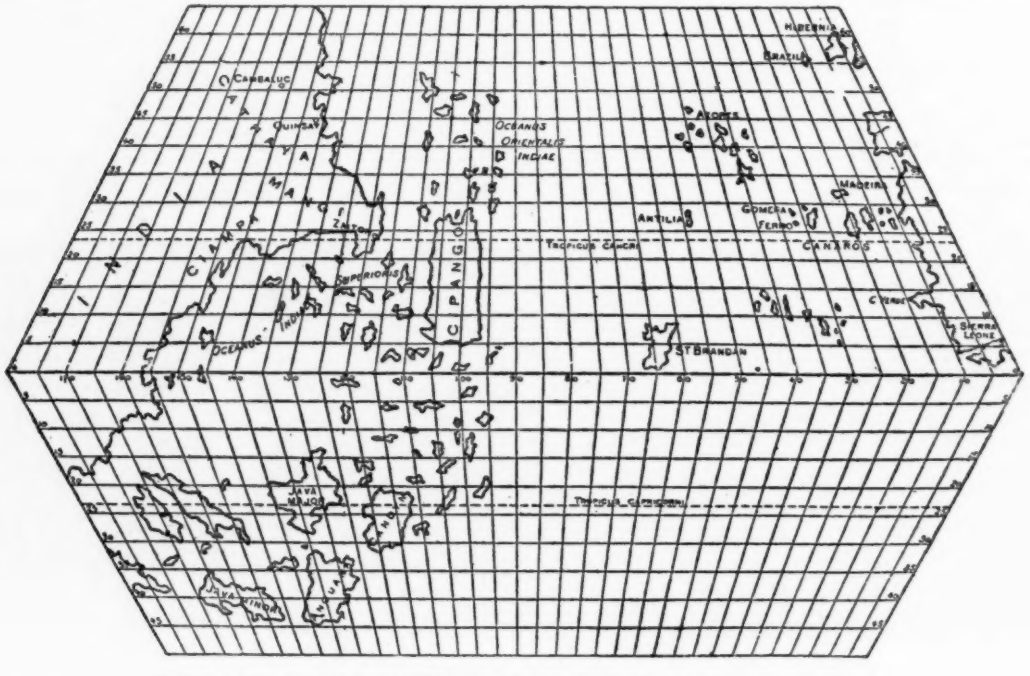
Bass-relief on Base of the Monument.



Toscanelli's Map sent to Portugal in 1474 and used by Columbus in his first voyage across the Atlantic.

Parade of New York School Boys.

There will be 10,000 boys in line, divided into 20 battalions of 500 each. Each company will consist of two rows, 20 boys in each row. The boys will select their own officers from among themselves. They will be drilled in armories and by regular drill sargeants.

No boy is to be allowed to march under twelve years of age, or without the consent of his parents, as the length of march will be about 2½ miles. There will be no flags or banners in line, in order that the even line of heads will remain unbroken in effect. Each boy is to wear a badge, but there will be nothing to distinguish one school from another.

Columbus' Portraits.

It is wonderful how one man can look as many different ways as Columbus. The highest authorities say there is no likeness of Columbus that can be relied on. From his son Ferdinand, we learn that his face was long, neither full nor thin; his cheek bones rather high; his nose aquiline; his eyes light gray; his complexion fair and high colored. Up to the age of thirty his hair was of light color, but became rapidly gray after that age.

It must be admitted in the face of these details that not one of the portraits gives very positive evidence of presenting the great discoverer as he lived.

The earliest claimant for consideration is a wood engraving by Paolo Giovio, published in 1575. Next in point of antiquity is the engraving called the De Bry portrait. It shows a head covered by a three-cornered cap, the face being short and broad and having the characteristics of the Dutch in a marked degree. It does not correspond with the best authenticated descriptions. DeBry claimed that the original canvas from which it was taken was painted from life by order of Ferdinand, the king.

There are many other so-called likenesses of Columbus. They are widely scattered and it is not easy to link them with the three shown above, which probably have the best claims to consideration. But these three have little in common. They would never be taken for portraits of the same person.

The most authoritative descriptions of the stature, complexion, and personality of Columbus coincide, and yet the most generally accepted portraits are not in harmony. Many artists disregard the statement that his nose was acquiline and make it of a decidedly *retrousse* type; others portray him as a brunette with a short, fat, and beardless face. The next time we see him he is a blonde with a long, thin face, well covered with whiskers. We always know him, as the artist thoughtfully introduces his name; otherwise a lively guessing match might result. The style of the pictures would naturally suggest the celebrities of a few centuries ago. They might be taken for Plato, Othello the Moor, Alaric, Julius Cæsar, Richard III., and a score or others whose faces figure in history. Even a composite of the many portraits could not blend or unite in one the discordant conceptions which we see every day. We must know Columbus by his deeds, and not by his pictures.

Jomard published in 1845 a portrait in support of a Titianesque canvas, which he had obtained at Vicenza. This picture bore the inscription "Christophorus Columbus." He claimed that the features were in accord with the description of writers contemporaneous with Columbus. The pointed beard and Flemish ruff he accounted for by assuming that they were the additions of a later hand. These and other accessories, however, prevented the acceptance of Jomard's views.

Columbus at the World's Fair. II.

The life history of Columbus will be brought forward at the World's fair as one of the leading features of the exhibition.

Photographs and Sketches of Columbus.

In the fullest manner, and principally in photographs and sketches, will be illustrated the different cities claiming Columbus as a native—Cogoleto, Quinto, Genoa, etc.—with a model of the house in which he is believed to have been born and models of his burial-places. If other points in the history of Columbus are subject to skeptical treatment, few persons ever seriously have denied that he was buried in two hemispheres and more than once in each.

An extensive picture-gallery is to contain all the paintings in which Columbus figures, either as originals or copies. A considerable number of original paintings probably will be loaned for this exhibition; of such as cannot be removed copies of value are to be substituted. A supplementary gallery, to represent the court of Ferdinand and Isabella, will contain a large collection of historical portraits, including those of the Pinzons and of Juan Perez de Marchena, prior of the convent of La Rabida, who interceded successfully for Columbus after his project had been rejected, and whose influence in the later issue of securing a crew was again decisive. The entire series of portraits of Columbus acknowledged as having any artistic merit will be shown in a separate room. As many as forty-five of these singularly dissimilar examples—for a considerable part is necessarily in the form of copies—are already collected.

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STATUE OF COLUMBUS.
From Italian Monument in New York city.

Statues and Monuments.

Another series in this complete life interest of Columbus will consist of facsimiles of all the busts statues, and monuments

associated with his name which exist in the world, from the fine Genoa monument down to the least valuable ones.

Charts and Maps.

The complete series of charts, including in originals or copies all the ancient maps known, from the earliest representations of the earth by the Hindoos, will be an extraordinary part of this display. As strange, to the majority of observers, will appear the collected maps of the Arabian geographers, prohibited by their religion from representing living animals. The original globe of Martin Behaim, preserved in the town hall of Nuremberg, is among the other quaint geographical works to be expected, as the United States minister at Berlin has made a request for it, which probably will be granted.

Fac Simile of La Rabida.

The building to contain so interesting a collection will be of itself in the character of history. This is to be constructed as a reproduction of the convent of La Rabida on the headland projecting into the lake south of the pier. The selected tongue of land forms the most elevated site on the exposition grounds. To aid the exactness of the copy of this ancient convent at or near Palos in Andalusia, where Columbus frequently was sheltered during long intervals of repose as the guest of the friendly prior, the official emissary to Spain has made wax impressions from the structure in different features of the design. A room in the building is to be fitted up to correspond precisely, according to accepted evidence, to that given the discoverer of America in his conventual abode.

The Ships of Columbus.

Contracts have been made for the construction of the *Pinta* and the *Nina*, a bill having been passed by the Senate making the necessary appropriation for the work. When the construction is complete, this copy of the Old World fleet will be navigated across the Atlantic, but whether in the original direction is not stated. The ships, at any rate, will be on hand to take part in the great naval review in New York harbor when that spectacle is offered. The journey hither from any country will be repaid by the sight of the naive little *Santa Maria* bearing the royal blue flag of the flotilla as four hundred years ago, and holding her honored way among the proudest modern ships of the entire world. In the naval review and during the term of the exposition the *Santa Maria* will be manned by Spanish sailors in the costume of the Columbian period, and be rigged and equipped as nearly as possible as during the great navigator's first voyage. After the display in New York harbor this decked, four-masted vessel of ninety feet keel, with her armament of heavy guns, and small pieces forward, will be taken through the canals and lakes to Chicago, to be anchored beneath the walls of the convent of La Rabida during the exhibition. At its close the caravel will return to Washington, and will be permanently moored in the lagoon south of the Executive mansion.

The Anchor of Columbus.

The night of August 2, 1498, the navigator's little fleet had to encounter a mountainous surge caused, it is thought, by the swelling of one of the rivers which flow into the Gulf of Para, and that one of his ships was torn violently from her anchorage leaving her anchor behind her. The anchor thus lost, nearly 400 years ago, has recently been recovered by Senor Argostino, the present owner of the point of land in question, Point Arenal as Columbus named it. It has the rare merit of being the oldest relic extant of the great navigator and of the discovery of America. As would be expected from the age of this relic it is an anchor in the simplest form of expression.

Cannon on Columbus' Ship.

Two of the cannon which, it is believed, were at one time mounted on board Christopher Columbus' flagship were received at Chicago recently. The cannon are of the ancient and clumsy pattern of such guns turned out in the fifteenth century. Nothing but the body of the guns remains, the woodwork, of course, having rotted away centuries ago. The guns themselves are almost worn to pieces and are not much more than huge chunks of rust. Indeed, the cannon are put on the "scrap iron" list in the custom house papers. These historic old pieces have been secured for exhibition at the World's fair. One of the naval officers who was detailed for work in connection with the Columbian exposition found the relics at one of the West Indian islands. Tradition and substantial proof showed that the cannon had been used in a fort erected by Columbus' son, and that they were brought from Spain with Columbus' fleet. The ruins of the fort are still to be seen.

The Columbus Medals.

The secretary of the treasury has been authorized to have 50,000 Columbian medals struck for use at the Fair. These will not be made at the mint at Philadelphia. It is said it would take eight years to make them there, as each medal will have to be struck fifty or sixty times to bring out the design in clear relief. Usually coins have only to be struck once, and are struck off at the rate of sixty a minute.

The designs for these medals have been made by leading artists. The most attractive of them is a figure draped and wearing the pointed cap of Liberty. She stands on a pedestal, with arms outstretched and a wreath held in each hand. In the sky above her head are clustered the thirteen stars of the original states. Behind her on a level prairie are on one side an Indian and on the other a vaquero, both mounted. Around her pedestal winds a scroll with the inscription: "Education and Popular Representation the Pillar of Liberty." The border is first a chain and then a succession of shields.

TWO COLUMBUS DESIGNS.

There are two Columbus designs. The first has Columbus standing on the shores of America, holding his sword aloft in his right hand, a banner in his left. His followers kneel around him. His caravels are just off the shore. Four medallions are placed along the border of the medal. Above is the head of Washington, below that of Harrison, to the right the head of Grant, to the left that of Lincoln. The forty-two stars encircle the central design.

Another design is the familiar scene representing Columbus kneeling, hat in hand and banner held aloft; his followers kneeling behind him, the Indians in the distance, the caravels against the horizon. This is not intended to have a border. The edge of the medal seems to be broken in places, as though it had been made in 1492 and had seen rough usage since.

All these designs are for the obverse of the medal. The design for the reverse has a laurel wreath surrounding a circle composed of these words: "First Premium, Columbian Commission," within which are the words: "Awarded by the." In a circle around the laurel wreath is the inscription: "World's Columbian Exposition, Chicago, Illinois, U. S. A., 1893."

Dedication Day Ceremonies.

The national salute at sunrise will inaugurate the ceremonies of dedication day.

The president of the United States, his cabinet, members of the Supreme Court, members of the Senate and House of Representatives, distinguished foreign guests, and governors of the different states and territories, with their official staffs, will be escorted by a guard of honor composed of troops of the United States army, detachments from the various State National Guards, to the Manufacturers and Liberal Arts building, in which the dedicatory exercises will be held.

The Procession of the Centuries.

There will be a civic celebration beginning with an imposing procession indicative of peace, contentment, and prosperity, participated in by innumerable civic organizations. In the evening at Jackson park amid myriads of electric lights and other displays, a water pageant, "The Procession of the Centuries," will move through the waterways of the exposition grounds.

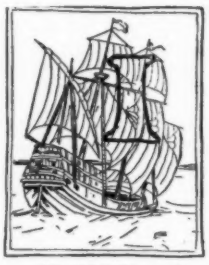
The vessels upon which the tableaus will be presented will be modeled after those of the age represented, and the subjects are to be as follows:

Aboriginal age, representing the American Indians.
The stone age, representing the cliff dwellers.
The age of metal, representing the Aztecs, their religious rites, manners, and customs.
Columbus at the Court of Ferdinand and Isabella.
Departure of Columbus from Palos.
Discovery of America.
Columbus before the Court of Ferdinand and Isabella, presenting natives and the strange products of the new country.
English cavaliers and the settlement of Jamestown.
Hendrik Hudson; discovery of the Hudson river; Dutch settlement of New Amsterdam.
Landing of the Pilgrims and illustrations of early Puritan life.
Ferdinand de Soto; discovery of the Mississippi.
The French explorers; Pere Marquette; Chevalier La Salle and the North west.
Washington and his Generals.
Signing of the Declaration of Independence.
Union of the Colonies; the thirteen original states; the sisterhood of the great Republic; welcoming the Territories to the constellation of the States.
"Westward the course of empire takes its way."
The Genius of Invention; application of steam, etc.
Electricity and electrical appliances.
War, representing valor, sacrifice, power, death, devastation.
Peace, representing tranquillity, security, prosperity, happiness.
Agriculture.
Mining.
Science, art, and literature.
The universal brotherhood of man; equal rights; law of justice; Liberty enlightening the world.

A $50,000 monument to Columbus, designed by sculptor Howard Kretschmar, of Chicago, will be erected in Lake Front park, which has been termed the "Gateway to the Exposition."

Estimates of Columbus' Character.

The Heroic View.



IDEAS of Columbus that have long been in vogue are those derived from the writings of Washington Irving and W. H. Prescott. Their sources of information were practically the same and their mental gifts were of the first order, while the style of both has been justly praised. The Columbus of Irving and Prescott is a noble figure, a most engaging character, a veritable hero, fervid of imagination, lofty of purpose, but withal visionary, ambitious, superstitious, and religiously bigoted. The charge of "hero worship" lately made against these writers undoubtedly has some foundation.

Within the past few months three authors—Prof. John Fiske; Ex-President Adams, of Cornell university, and Justin Winsor, librarian of Harvard university, have published books, two of which materially change this view of the discoverer.

Ex-President Adams' Opinion.

Mr. Adams gives Columbus credit for wonderful geographical and nautical acquirements, for his time, and great persistance in pushing his enterprise. He is inclined to believe that the early voyages of Columbus were piratical. In common with other writers he finds that the discoverer was very proud, and some of his misfortunes may be attributed to this quality. Much of the trouble that came to the Spaniards in Hispaniola was due, Mr. Adams thinks, to the want of judgment and tact of Columbus. He also encouraged the enslavement of the Indians. The writer holds that this course cannot be defended even on the theory that he wished to convert them to Christianity. Mr. Adams thinks Columbus was much below the best moral sentiment of his age in his views of slavery. The writer says of him:

"He entered no protest against any of the abuses of his time. On the contrary he was ever ready to avail himself of those abuses whenever he could do so to his own advantage."

Mr. Winsor's Estimate.

We quote below from Mr. Winsor's history, "Christopher Columbus":

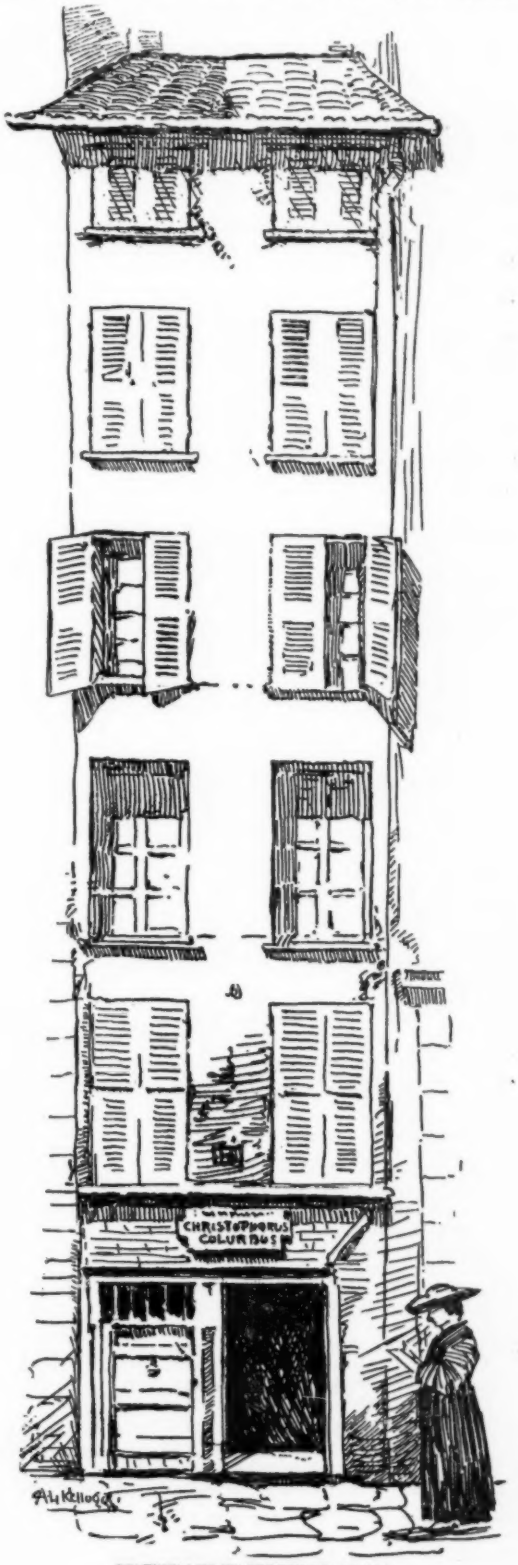
"Those cosmographical views which had come down the ages, at times obscured, then for a while patent, and of which the traces had lurked in the minds of learned men by an almost continuous sequence for many centuries, at last possessed by inheritance the mind of Columbus. By reading, by conference with others, by noting phenomena, and by reasoning in the light of all these, upon the problem of a western passage to India, obvious as it was if once the sphericity of the earth be acknowledged, he gradually grew to be confident in himself, and trustful in his agency with others. He was far from being alone in his beliefs, nor was his age anything more than a reflection of long periods of like belief. There was simply needed a man with courage and constancy in his convictions, so that the theory could be demonstrated. This age produced him. Enthusiasm and the contagion of palpable though shadowy truths gave Columbus, after much tribulation, the countenance in high quarters that enabled him to reach success, deceptive though it was. It would have been well for his memory if he had died when his master-work was done. With his great aim certified by its results, though they were far from being what he thought, he was unfortunately left in the end to be laid bare on trial, a common mortal after all, the creature of buffeting circumstances, and a weakling in every element of command. His imagination had availed him in his upward course when a serene habit in his waiting days could obscure his defects. Later, the problems he encountered were those that required an eye to command, with tact to persuade, and skill to coerce, and he had none of them."

Of Columbus' relations with the Indians Mr. Winsor says: "He talked a great deal about making converts of the poor souls, while the very first sight he had of them prompted him to consign them to the slave-mart, just as if the first step to Christianize was the step which unmans." Mr. Winsor asserts that other faults of Columbus were his cupidity and lack of generosity.

Mr. Fiske Dissents.

Mr. Fiske takes exceptions to this view in his "Discovery of America." His words may serve as an answer to both Mr. Winsor's and Mr. Adams' view of Columbus. We quote as follows:

"Mr. Winsor writes in a spirit of energetic (not to say violent) reaction against the absurdities of Roselly de Lorgues and others who have tried to make a saint of Columbus; and under the influence of this reaction he offers us a picture of the great navigator that serves to raise a pertinent question. No one can deny that Las Casas was a keen judge of men, or that his standard of right and wrong was quite as lofty as any one has reached in our own time. He had a much more intimate knowledge of Columbus than any modern historian can ever hope to acquire, and he always speaks of him with warm admiration and respect. But how could Las Casas have ever respected the feeble, mean-spirited driveler whose portrait Mr. Winsor asks us to accept as that of the discoverer of America?"



BIRTHPLACE OF COLUMBUS, GENOA.

Mr. Fiske gives an insight into one side of his character when he says:

"He had come to regard himself as a man with a mission to

fulfil, as God's chosen instrument for enlarging the bounds of Christendom and achieving triumphs of untold magnificence for its banners. In this mood he was apt to address kings with an air of equality that ill comported with his humble origin and slender means."

From Edward Everett Hale.

The story of the life of Columbus is curiously dramatic. This is no monotonous voyage on the flat level of a canal. The hero of this advance has to climb mountains and to go down precipices; he meets the unexpected at every moment; and all the resources of a divine humanity are necessary to conquer them. If this man were not alive with the life of God, if he did not know how to create as God creates, if he had not the magic power of infinite hope—nay, did he not unite the three eternities of faith and hope and love—he would have failed. So it is that his life, from one end to the other, is a series of dramatic adventures; and so it is that the world follows that narrative with a curiosity always fresh and never disappointed.

OFFICIAL COLUMBUS DAY BADGE.

"Give me white paper!
One storm-trained seamen listened to the word:
What no man saw he saw, he heard what no man heard.
For answer he compelled the sea
To eager man to tell
The secret she had kept so well:—
Left blood and wo and tyranny behind.
Sailing till West that land new-born to find,
For all mankind the unstained page unfurled
Where God might write anew the story of the world."

—*The Independent.*

The First to Greet Columbus.

When the feast is spread in our country's name,
  When the nations are gathered from far and near,
When East and West send up the same
  Glad shout, and call to the lands, "Good cheer!"
When North and South shall give their bloom,
  The fairest and best of the century born,
Oh, then for the king of the feast make room!
  Make room, we pray, for the scarlet thorn!

Not the goldenrod from the hillsides blest,
  Not the pale arbutus from pastures rare,
Nor the waving wheat from the mighty West,
  Nor the proud magnolia tall and fair
Shall Columbia unto the banquet bring.
  They, willing of heart, shall stand and wait;
For the thorn, with his scarlet crown, is king.
  Make room for him at the splendid fete!

Do we not remember the olden tale?
  And that terrible day of dark despair,
When Columbus, under the lowering sail,
  Sent out to the hidden lands his prayer?
And was it not he of the scarlet bough
  Who first went forth from shore to greet
That lone grand soul, at the vessel's prow,
  Defying fate with his tiny fleet?

Grim treachery threatened, above, below,
  And death stood close at the captain's side,
When he saw - oh, joy!—in the sunset glow,
  The thorn-tree's branch o'er the waters glide.
"Land! Land ahead!" was the joyful shout;
  The vesper hymn o'er the ocean swept;
The mutinous sailors faced about;
  Together they fell on their knees and wept.

At dawn they landed with pennons white;
  They kissed the sod of San Salvador;
But dearer than gems on his doublet bright
  Were the scarlet berries their leader bore;
Thorny and sharp, like his future crown,
  Blood-red, like the wounds in his great heart made,
Yet an emblem true of his proud renown
  Whose glorious colors shall never fade.

—*Emma Huntington Nason*, in July *St. Nicholas*.

Boy's Declamation.

(For the Higher Grades.)

"The voyage of Columbus was a protest against the ignorance of the medieval age. The discovery of the New World was the first sign of the real renaissance of the Old World. It created a new heavens and a new earth, broadened immeasurably the horizon of men and nations, and transformed the whole order of European thought. Columbus was the greatest educator who ever lived, for he emancipated mankind from the narrowness of its own ignorance and taught the great lesson that human destiny like divine mercy arches over the whole world. If a perspective of four centuries of progress could have floated like a mirage before the eyes of the great discoverer as he was sighting San Salvador, the American school-house would have loomed up as the greatest institution of the New World's future. Behind him he had left medieval ignorance encumbered with superstition and paralyzed by an ecclesiastical pedantry which passed for learning. Before him lay a New World with the promise of the potency of civil and religious liberty, free education, and popular enlightenment. Because the school-house, like his own voyage, has been a protest against popular ignorance, and has done more than anything else to make our free America what it is, it would have towered above everything else in that mirage-like vision of the world's progress.

The public school celebration on Columbus Day is to be commended, therefore, not only as a unique method of diffusing among local centers of American life from Plymouth Rock to the Golden Gate the significance and spirit of a memorable anniversary, but also as a practical expedient for emphasizing the value of the most characteristic of national institutions, the free school. When the New World was discovered by Columbus, Spain was the greatest power in Europe, and England was an obscure and petty state. During the first century after the landing on San Salvador a great Spanish empire was founded stretching from the Gulf of Mexico to Patagonia. Slowly and laboriously the English-speaking race obtained a foothold in North America. Liberty was the breath of its life and free education was its most precious bequest to succeeding generations. The Spanish conquerors never opened a free school. As time passed their empire revolted against them, and the constitutional forms of the English-speaking race in the North were roughly copied by one Southern republic after another. Popular education was neglected, as it had been under Spanish viceroys, and consequently the moral force of enlightened public opinion was lacking in the Southern hemisphere. What has made the American republic the great power in modern civilization which it has been for a century, is the free-school system."

SOUVENIR COINS FOR THE WORLD'S FAIR.

(From "Ode for Columbus Day"—From Official Program.)

"God helping me," cried Columbus, "though fair or foul the breeze,
I will sail and sail till I find the land beyond the western seas!"
So an eagle might leave its eyrie, bent, though the blue should bar,
To fold its wings on the loftiest peak of an undiscovered star!
And into the vast and void abyss he followed the setting sun;
Nor gulfs nor gales could fright his sails till the wondrous quest was done.
But Oh, the weary vigils, the murmuring, torturing days,
Till the *Pinta's* gun, and the shout of "Land!" set the black night ablaze!
Till the shore lay fair as Paradise in morning's balm and gold,
And a world was won from the conquered deep, and the tale of the ages told!
Uplift the starry Banner! The best age is begun!
We are the heirs of the mariners whose voyage that morn was done.
Measureless lands Columbus gave and rivers through zones that roll,
But his rarest, noblest bounty was a New World for the Soul!

—*Edna Dean Proctor.*

Columbus.

Behind him lay the gray Azores,
Behind the Gates of Hercules;
Before him not the ghost of shores,
Before him only shoreless seas.
The good mate said: "Now let us pray,
For lo! the very stars are gone.
Speak, Admiral, what shall I say?"
"Why, say: 'Sail on! sail on! and on!'"

* * * * * *

They sailed and sailed, as winds might blow,
Until at last the blanched mate said:
"Why now not even God would know
Should I and all my men fall dead;
These very winds forget their way,
For God from these dread seas is gone.
Now speak; brave Admiral, speak and say"
He said: "Sail on! sail on! and on!"

* * * * * *

Then pale and worn, he kept his deck,
And peered through darkness. Ah, that night
Of all dark nights! And then a speck—
A light! A light! A light! A light!
It grew, a starlit flag unfurled!
It grew to be Time's burst of dawn,
He gained a world; he gave that world
Its grandest lessons: "On! and on!"

—*Joaquin Miller* in *Argonaut.*

Song of Columbus Day.

(From Official Program.)

Air: Lyons.

Columbia, my land! all hail the glad day
When first to thy strand Hope pointed the way:
Hail him who thro' darkness first followed the Flame
That led where the Mayflower of Liberty came.

Dear Country, the star of the valiant and free!
Thy exiles afar are dreaming of thee.
No fields of the Earth so enchantingly shine,
No air breaths such incense, such music as thine.

Humanity's home! thy sheltering breast
Gives welcome and room to strangers oppress'd.
Pale children of Hunger and Hatred and Wrong
Find life in thy freedom and joy in thy song.

Thy fairest estate the lowly may hold,
Thy poor may grow great, thy feeble grow bold,
For worth is the watchword to noble degree,
And manhood is mighty where manhood is free.

O Union of States, and union of souls!
Thy promise awaits, thy future unfolds,
And earth from her twilight is hailing the sun,
That rises where people and rulers are one.

—*Theron Brown.*

The Educational Field.

R Anna Morris.

Miss Morris started in life, as a teacher, at sixteen, without means or influence and her subsequent career is a striking illustration of what can be accomplished through determined industry and an ambition to rise above the level.

After a few years of country teaching, she attended the state normal school at Potsdam, N. Y., then returned to be principal of a village school at Greenville, Iowa, removing afterwards to better positions at New Sharon and Oskaloosa. At the latter place she taught seven years, three as principal of a ward school. In 1883 she accepted a position in the schools of Des Moines, Ia. After two years of responsible work, and not knowing how to rest as she worked, she found herself in a condition physically to require rest and change. She resigned her position and went to New York city to study elocution for which she possessed a natural taste and talent. While engaged in this pursuit she was induced to take up the study of physical education in Dr. Anderson's school. Her pleasure in these branches, added to her conviction that the teachers and schools needed just this instruction, brought her to the decision to complete the course in physical education and elocution and take the good work back to her fellow teachers. She found herself, through the practice of the new principles of physical education, lifted from her nervous, worn condition, and is to-day the embodiment of these principles in her glowing health and vigor and ability to sustain fatigue.

Having come up through the public schools, she is a loyal friend to them; and with a conviction that in them the true work of benefiting the people must be begun, she has refused good positions in colleges and higher schools, and for the last five years has faithfully devoted herself as supervisor of physical culture to the pioneer task of making physical education practical and popular in the Des Moines schools. Her success in these efforts is justly acknowledged in the annual report of these schools:

"Under cautious, judicious management, prejudice has given way to a healthy state of thinking on the subject. Among the pupils, many forms of nervous diseases have yielded to this training, while round-shoulders and sunken chests have been remedied. The work has grown to be a part of the regular school management, and has entered into the position, bearing, manners, and expressions of the children."

Miss Morris continues to be a great student and spares neither time nor money in self-improvement. In her chosen line she has studied with all of the prominent teachers in the country; she has great mental reserve, and is a close observer of human nature; she knows how to meet questions frankly and squarely, but avoids sharp corners.

With an earnest enthusiasm she puts herself in sympathy with her pupils who become willing learners. In her lectures she is earnest and clear and has a fine stage presence and a charming personality.

She has been exceptionally successful in institute work and read a paper before the National Teachers' Association at their last meeting.

Miss Morris has resigned her position at Des Moines to enter a broader field, as a worker with the teachers in different localities. She hopes, through the medium of popular classes and practical illustrations with schools in the presence of educators and upon the lecture platform, to convince people that what has been accomplished so successfully in one city should become a part of the public schools of the country. She advocates no system to the exclusion of others, but combines such exercises as will accomplish symmetrical results for the child. Through the American Book Co. she has published a manual, "Physical Education," representing the tested experience of her several years' work.

Her series of ten articles on "Physical Culture" in THE SCHOOL JOURNAL last year was much appreciated by our readers. During the last months Miss Morris has visited many prominent cities in Iowa, finding enthusiastic classes among the teachers, and leaving them inspired and better equipped to look after the physical welfare of their children. At present she is engaged in this work in the public schools of San Francisco, where she finds warm endorsement from Superintendent Swett and the city press.

An Important Meeting.

Circumstances have conspired to reduce the space allotted to the department of liberal arts of the Columbian exposition. The chief sufferers by this reduction are the classes of the department that relate to education. This threatens a failure to the carrying out of all plans heretofore made by this department and it becomes necessary for those who control the educational work in the country to unite in a concerted effort for relief.

To this end a call, signed by Albert G. Lane, superintendent of schools of Chicago; William R. Harper, president University of Chicago; Ferris S. Fitch, superintendent public instruction of Michigan, and W. N. Hailmann, director Indiana educational exhibit, has been issued for a meeting of superintendents of public instruction, presidents of higher institutions of learning, and others to be held at Chicago Oct. 4, at the rooms of the board of education. Representatives of distant states who cannot attend are requested to send telegrams expressing their concurrence in a movement to secure sufficient space for a creditable presentation of the educational work of the United States, or take such other action as will work to secure the common aim.

In the Philadelphia common council, Messrs. Shoemaker, Hawkes and Kendrick object to the board of education's plan to increase the course of studies in the normal school one year, because it will entail an additional expense on the class that expected to graduate next year! "What are the schools for in Philadelphia?" Answer: "To furnish places for graduates of the normal school." "Who are to be considered first, the teachers or the children?" Answer: "The teachers of course."

Miss Mary E. Burt, of the Chicago board of education, will go to New York each month during the coming year to reorganize the literature work of the Berkeley school. She will stay five days each time, will give model lessons in each grade and will hold institutes in the school for the benefit of the Berkeley teachers and perhaps other teachers not in the Berkeley. She will lead and direct a class in literature connected with the Berkeley school. Miss Burt will also visit Boston in the interest of a literary production which she is about to publish in connection with Mrs. Antoinette Van Hoesen Wakeman—well known on the editorial staff of the Chicago *Evening Post*, and as secretary of the Press League, a national combination of newspaper women.

Edward Wait.

Edward Wait, superintendent of the Lansingburg schools, N. Y., died August 27. At a meeting of the teachers on Thursday, September 8, immediately after returning from vacation, many things were said in loving remembrance of their late supervisor, and the following memorial was adopted:

"Probably there is not one among our village school children, and certainly there is no teacher in Lansingburg, who does not feel a sense of personal, irreparable loss in the death of Edward Wait—a feeling which deepens as the autumn days go by, and we miss his genial presence; his wise, kind help, always freely and gladly rendered.

"In the ordinary intercourse of life his bright look, cheery grasp of the hand, and readiness in conversation made him widely popular. He was always a busy man, and his work was not measured by times. Not only in his hours of labor, but in those of leisure too, he pursued with consistency his own natural bent toward study, and assisted many who stood in need of intellectual help.

"He had a deep pity and sympathy for the poor and unfortunate, as many a recipient of his bounty can testify; but he was one who "gave by stealth." Although modest in the extreme as to his own acquirements, he was a man of large attainments and was eminently fit for his position.

"As a citizen he was intensely patriotic. Having given of the best strength of his early manhood to the service of his country on "the tented field," he was earnestly desirous that the young citizens under his charge should become men and women appreciative of their privileges, intelligent as to the rights and duties of freemen, ardent in their love for the flag, and scornfully indignant at the thought of treason in any of its forms. His personal influence in thus fostering patriotism was strong and deep. Nothing was left undone to stimulate interest in American history and kindred studies, and his frequent presence in the class-room, when these studies were in hand, almost always brought a glow of enthusiasm that left permanent impress upon young hearts.

"The Almighty Father in infinite wisdom has seen fit to enroll his among the names of the

"Choir invisible
Of those immortal dead who live again
In minds made better by their presence,"

and we bow in submission to the Divine will, feeling, too, that he has entered into well-earned rest. It will be long ere we shall forget his kindness, his large hearted tolerance, his loyalty to his fellow-workers and assistants, his tact, his excellent judgment, his professional spirit, his ungrudging and often laborious service in the cause of education outside his own immediate work, his modesty, his perfect sincerity, his unswerving fidelity to convictions of right, and truth, and duty."

Pratt Institute, the co-educational, technical, and industrial school of Brooklyn, opened its doors to students Sept. 15. The institute will celebrate the fifth anniversary of Founder's day, Oct. 2, by the issue of a *Monthly*, to contain news from the departments, items of educational interest, contributed and selected articles, the library bulletin, and institute gossip and announcements. Among the important additions to the curriculum may be noted the kindergarten training class which opens this fall. Miss Alice D. Fitts, of the Chicago kindergarten college, will be the teacher. Each student will do practical work in a model kindergarten under the immediate supervision of the director of the department, Miss H. D. Mowry.

Supt. F. B. Gault, of Tacoma, Washington, has accepted the presidency of the state university of Moscow, Idaho. Mr. Gault was for several years a prominent teacher in Iowa, and for some time superintendent of the Pueblo, Colo., public schools. He is in the full vigor of manhood, an excellent scholar and a successful administrator of affairs. The Idaho people have made a good choice.

The new gymnasium at Yale college is said to eclipse anything in the world of a similar nature. Dr. Anderson and the students cannot say enough in praise of it. It is declared to be perfect in detail, from the baths on the first floor to the gymnasium proper under the glass roof of the third floor. The cost of the apparatus alone is $5,000 and all the machinery is suited to large class work according to the German idea, and will get work from all the students instead of a few good ones. Dr. Anderson will be assisted in his work by his brother. All the work, for the first year at least, will be optional.

New York City.

The girls are not to be left out of the celebration in this city, if they do not keep step with the boys in a public march. But a unique feature of the day will be the appearance of 6,000 girls, who will occupy a stand beside the Lafayette monument. They will wear striped costumes of red, white, and blue, and will be arranged so that the entire array will represent a huge American flag. They will sing "The Star Spangled Banner." A body of colored children, in bright costumes, from St. Benedict's home, will sing other songs along the line of march.

Superintendent Jasper says of the discipline of the New York city schools:

"So well regulated were these systems of order and discipline, that during the whole of last year there were only fifty-one suspensions from the primary and grammar schools, suspension being the most severe penalty inflicted. In a system containing 233 different departments or schools, with 3,496 principals and teachers, and with 196,307 different pupils in attendance during the whole or some part of the year, the occurrence of such a small number of cases calling for serious punishment is, I think, creditable to all."

An original feature of the Columbus celebration in New York City will be the Columbus Centennial prize offered by Brentano's, for the best history of the discovery of America, written by a pupil of the New York public schools. The first prize is $100 in gold, and there are premiums of $50 and $25.

Miss Angeline F. Simpson, of grammar school No. 86, New York City, died suddenly September, 21, of typhoid malaria. She has been in the schools of this city since 1860. Miss Simpson has been prominent in the Mutual Benefit Society for Teachers, and leaves hosts of friends both in and out of school ranks.

Miss Caroline F. Whiting, the well-known principal in this city, has resigned her position in that school, after 57 years' work, in which she has never missed half a dozen days, from sickness or other causes. Her resignation is due to her increasing years, as she is now approaching eighty, but her friends will be glad to know that she is still as well and strong as she was seven years ago, when her fiftieth year as a teacher was celebrated.

Fall and Winter Associations.

Massachusetts Teachers' Association, Springfield, Thanksgiving week.
Montana State Association; Missoula, Dec. 27-29.
Iowa State Association; Cedar Rapids, December 27-30.
Illinois State Teachers' Association; Springfield, December 27-28-29. George R. Shawhan, Urbana, Pres.; Joel M. Bowlby, Metropolis, Sec'y.
Vermont State Teachers' Association; Montpelier, September 29-October 1. A. H. Campbell, Ph. D., Chairman Executive Committee, Johnson, Vt.
Connecticut State Teachers' Association, Meriden, October 28-29. W. F. Gordy, Hartford, Pres.; Joseph R. French, New Haven, Secretary.
Rhode Island Institute of Instruction, Providence, Nov. 3, 4, 5.
Vermont State Teachers' Association, at Montpelier, Sept. 29, 30 and Oct. 1; Pres., Prin. F. W. Dewart, St. Albans; Sec., Prin. F. K. Graves, Swanton.

Important Events, &c.

The "Current Events" given below have been especially written for use in the school room. They are selected from Our Times, published by E. L. Kellogg & Co.; price 50c. a year.

News Summary.

Sept. 16.—The commander of the Russian troops, ordered to withdraw from the Pamir.

Sept. 17.—Several breaks in the banks of the river Nile cause inundations.

Sept. 19.—The members of the Canadian cabinet oppose the resignation of Sir John Abbott.

Sept. 20.—Ex-Gov. Porter resigns as minister to Italy.—The great Laguna cotton district in the state of Durango, Mexico, completely under water.

Sept. 21.—Several Turkish journals confiscated by the government.

Sept. 22.—Mexican customs officers seizing American cotton on the border.

Sept. 23.—Lieutenant Peary and party arrive at Philadelphia.

THE GRAND ARMY REUNION.

Never since the grand review at the close of the war in 1865 has Washington seen such a parade as took place at the Grand Army Reunion in Washington recently. It is estimated that there were eighty thousand veterans in the city, besides the others who collected there. Nearly all the streets were handsomely decorated, and such legends as "Welcome to the Grand Army of the Republic," "Welcome Veterans," etc., were numerous. The next reunion will be held at Indianapolis.

GEN. JOHN POPE DEAD.

Gen. John Pope, a distinguished veteran of the war, died Sept. 23 in Sandusky, O. He was born in Louisville, Ky., and graduated from West Point in 1846. He served in Florida in 1842-'4 and a few years later he assisted in the survey of the northeastern boundary between the British provinces and the United States. The same year he joined the staff of Gen. Taylor in the Mexican war and was brevetted twice for gallant and meritorious conduct. He explored the fertile regions of northern Minnesota, and surveyed a route which was afterwards used in building the Texas Pacific railroad. In the war, Gen. Pope commanded in Missouri where he met with some successes and was later transferred to the command of the army of Virginia, retiring after the battle of Manassas. Then he conducted a successful expedition against the Sioux in the Northwest. After the war he won more honors while in charge of the department that included the states of Alabama, Florida, and Georgia. He was afterward in command of the departments of the Missouri and of the Pacific, retiring from the army in 1886.

Geographical Notes.

Pumping Out the Zuyder Zee.—A great engineering scheme is now being carried out which will add more than ten per cent. to the area of Holland. The original scheme was to drain the entire area of Zuyder Zee. Dams were to be built connecting the islands of Texel, Vlieland, Terschelling, and Ameland, which lie just outside on the border of the North sea. The tides from the latter set in too strong for this; so the engineers fell back to their present line. The dams are partly artificial and partly natural, for the tide greatly aids by depositing sand and silt on both sides of their structure. Presently the dams will reach the level of high water, the tides will be excluded from all the great expanse of sea to the southward, pumping will begin, and the dry land will rapidly increase. A few deep pools will remain as lakes, and channels will be provided for the Yssel river, and the Amsterdam canal. The cost is estimated at $95,000,000, but the land reclaimed from the sea will be worth three times that sum.

Brazilian Diamonds.—The most important diamond fields of Brazil are near the San Francisco river in the province of Minas-Geraes. The river enters the Atlantic a little way below the port of Pernambuco. In order to reach the diamond region one has to travel across the country in a stage coach, and then sail for many days on the San Francisco, in a slow-going, palm-thatched jaganda. This is a fever-haunted region, and hence is but thinly inhabited. Although the mines have never worked as systematically as those of Kimberley some very large diamonds have been found, notably the Estrella do Sul, "Star of the South," which figured at the Paris Exposition in 1856, as a rival to the celebrated Koh-i-noor (Mountain of Light), which had produced such a sensation at the first London exhibition a few years before.

Reporting Incoming Vessels.—About two hundred feet back from the beach at Fire island stands a pyramid-shaped building about forty feet in height, that is of much more importance than it seems to be. This is the ocean observatory from which the vessels are sighted. It is of the utmost consequence that the coming of the ship shall be known at the earliest possible moment. When it appears the fact is telegraphed to the Western Union Telegraph office in New York. The observer who is stationed at Fire island has an observing room on top of the tower fitted up with telephone and telegraphic instruments, maps, charts, etc. The walls are covered with pictures of ships of every description. He has attained a wonderful faculty in detecting vessels. He can usually tell what vessels they are by the lights at night and the flags in the day time; but often they are too far away for that and then he has to rely on other indications, such as the shape of the vessel, position of the boats, color of the smoke, and angle of approach.

Natural Wax.—This is found in the bituminous sandstone of coal measures. It was mined in Austria, Moldavia, and the Caucasus region, in large quantities, and has been used there for making candles for several centuries. This substance is of a brownish-yellow color, and has a pleasant aromatic odor, and when freed from impurities greatly resembles beeswax. Extensive quantities of this substance were also found a few years ago in the Wahsatch mountains of Utah. When refined it is essentially the same thing as paraffine.